

INCH-POUND

MIL-T-87038D(NU)  
21 MAY 1990

---

SUPERSEDING  
MIL-T-87038C(NU)  
1 December 1986

## MILITARY SPECIFICATION

### TROUSERS, MEN'S (BLUE, ENLISTED)

This specification is approved for use by the Navy Clothing and Textile Research Facility, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE

1.1 Scope. This specification covers the requirements for men's wool serge trousers.

1.2 Classification. The trousers shall be of one type in the following sizes and lengths (see 6.2).

1.2.1 Sizes. 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 42, 44, 46, 48 and 50.

1.2.2 Lengths. Extra-Short, Short, Regular, Long, and Extra-Long.

#### 2. APPLICABLE DOCUMENTS

2.1 Government documents.

---

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Officer in Charge, Navy Clothing and Textile Research Facility, 21 Strathmore Road, Natick, MA 01760-2490 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

---

AMSC N/A

FSC 8405

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

## MIL-T-87038D(NU)

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 shall be 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

- V-T-276 - Thread, Cotton
- V-T-280 - Thread, Cotton, Gimp, Buttonhole
- V-T-295 - Thread, Nylon
- \* NN-P-71 - Pallet, Material Handling, Wood, Stringer Construction, 2 Way and 4 Way (Partial)
- CCC-C-438 - Cloth, Buckram, Cotton
- DDD-L-20 - Label; for Clothing, Equipage, and Tentage (General Use)
- DDD-T-86 - Tape, Textile, Cotton, General Purpose (Unbleached, Bleached or Dyed)

## MILITARY

- \* MIL-C-368 - Cloth, Satin, Rayon and Cloth, Twill, Rayon
- MIL-C-823 - Cloth, Serge, Wool; Wool and Nylon, Polyester and Wool
- \* MIL-P-15011 - Pallet, Material Handling, Wood, Post Construction, 4 Way Entry
- MIL-B-17143 - Button, Insignia (Anchor, Plastic, Black)
- MIL-B-17757 - Boxes, Shipping, Fiberboard (Modular Sizes)
- MIL-C-21852 - Cloth, Taffeta, Nylon
- \* MIL-T-43548 - Thread, Polyester Core: Cotton-, Rayon-, or Polyester-Covered
- \* MIL-C-43718 - Cloth, Polyester; Polyester and Cotton; Polyester and Rayon, for Pockets

## STANDARDS

## FEDERAL

- 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 Load
- MIL-STD-1488 - Provisions for Evaluating Quality of Trousers
- \* MIL-STD-2073-1 - DoD Materials Procedures for Development and Application of Packaging Requirements
- \* MIL-STD-2073-2 - Packaging Requirement Codes

MIL-T-87038D(NU)

\* (Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Standardization Documents Order Desk, Bldg. 4D, 500 Robbins Avenue, Philadelphia, PA 19111-5094).

\* 2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

U.S. POSTAL SERVICE MANUAL

(Copies of the manual may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.)

\* 2.2 Non-government publications. The following document(s) form a part of this specification to the extent specified herein. Unless otherwise specified, the issue of documents which are DOD adopted shall be 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).

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT

National Motor Freight Classification

(Applications for copies should be addressed to the American Trucking Association, ATTN: Traffic Department, 1616 P Street, N.W., Washington, DC 20036-1404).

UNIFORM CLASSIFICATION COMMITTEE, AGENT

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, Illinois 60606-5808).

THE COLOR ASSOCIATION OF THE UNITED STATES

Department of Defense Standard Shades for Buttons  
Department of Defense Standard Shades for Sewing Threads

(Application for copies of color cards should be addressed to the Color Association of the U.S., 343 Lexington Avenue, New York, NY 10016).

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

## MIL-T-87038D(NU)

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 Guide sample. Guide samples, when furnished, are 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 First article. When specified (see 6.2,) the contractor shall furnish sample unit(s) for first article inspection and approval (see 4.3).

3.3 Materials.

3.3.1 Basic material. The basic material for the trousers shall be a 15 ounce wool serge, shade Blue 3346 conforming to type I, class 5 of MIL-C-823. The piece no. shall be 89096.

3.3.2 Pockets and linings. The material for the pocket, waistband lining and front broadfall lining shall be a twill cloth conforming to class 1 of MTI C 43718. The color shall be black 423.

\* 3.3.3 Binding. The material for binding shall be a nylon taffeta cloth conforming to type IV of MIL-C-21852. As an alternate, a rayon binding may be use and shall conform to class 1 of MIL-C-368. The color shall be black. The binding shall be cut on a 45 (+ 5) degree angle in strips of 7/8 to 1 inch wide. The ends of the strips shall be joined together by stitch type 301 and the seam type SSa-1 with 10-12 stitches per inch.

3.3.4 Tape. The tape for the hanger loops and reinforcing the front crotch and seat seam shall be cotton, 1/2 or 5/8 inch wide, dyed black, conforming to type I, class 3, of DDD-T-86. Colorfastness to bleaching is not required.

\* 3.3.5 Lace. The lace for the back opening shall conform to the following requirements (see 4.4.1):

Yarn	- Polyester, 150 denier, continuous filament
Braid	- Flat, non-tubular, 33 carriers, 2 or 3 ends per carrier, 26 picks per inch (min)
Color	- Black
Colorfastness	- Good to perspiration, wet-dry cleaning, light, and laundering, and crocking not greater than 3 0
Weight	6.25 ounces (177.1 grams) per 100 laces (min)
Breaking strength	45 pounds (200.2 N)(min)
Length	37 (- 1) inches
Width	- 10.32 (+ 1/32) inch
Plastic tips	- Both ends, 3/4 inch long, black cellulose acetate or cellulose butyrate sheeting

## MIL-T-87038D(NU)

3.3.6 Thread.

\* 3.3.6.1 Thread, polyester, covered. The thread used for stitching and seaming the trousers shall be cotton or rayon covered polyester thread conforming to the requirements of MIL-T-43548. The use of polyester covered polyester thread is prohibited. The thread shall be shade Black AA, Cable No. 66043 conforming to the Department of Defense Standard Shades for Sewing Threads and in the following sizes:

Operation	Ticket No.	Ply
Seaming, stitching, tacking bartacking and buttonholes	50, 70	2 or 3
Overedging	70	2 or 3
Button sewing	30	2 or 3

3.3.6.2 Thread, cotton. As an alternate to the covered polyester thread, a cotton thread conforming to V-T-276, type I, may be used. The color shall be the same as specified above in the following types and sizes.

Operation	Type	Ticket No.	Ply
Seaming and stitching	IA3	50, 70	3
Overedging	IA3	70	2
Tacking	IC2	0	3

3.3.6.3 Automatic button sewing. If an automatic machine which sews and shanks (wraps) the buttons in one operation is used, the thread shall be waxed nylon monocord special No. 5, having a minimum breaking strength of 16 pounds and a minimum length per pound of 2150 yards, and shall be tested for these requirements and for colorfastness (3.3.6.4) in accordance with test methods in V-T-295. The color shall be as stated in 3.3.6.1.

\* 3.3.6.4 Colorfastness. The dyed threads shall show colorfastness to wet-dry cleaning, perspiration and light equal to or better than the standard sample when tested as specified in V-T-276, V-T-295 or MIL-T-43548. As a limit of acceptability, or when no standard sample is available, the thread shall show a minimum of "good" colorfastness to wet-dry cleaning, perspiration and light when tested as specified in V-T-276, V-T-295 or MIL-T-43548.

3.3.7 Gimp. The gimp for reinforcing buttonholes shall be cotton, No. 8 conforming to type I or II of V-T-280. The color shall match Black shade AA, Cable No. 66043 in accordance with the Department of Defense Standard Shades for Sewing Threads.

\* 3.3.7.1 Colorfastness. The colored gimp shall show fastness to wet-dry cleaning equal or better to the standard sample. As a limit of acceptability, or when no standard sample is available, the colored gimp shall show a minimum of "good" colorfastness to wet-dry cleaning.

3.3.8 Buttons. The buttons for the front broadfall shall be plastic, insignia, sewing hole type, 25-line, anchor emblem, Black Shade BT, Cable No. 62001 in accordance with the Standard Shade for Buttons, and shall conform to class 1 of MIL-B-17143.

## MIL-T-87038D(NU)

3.3.9 Combination label. Each pair of trousers shall have a combination identification, instruction and personal label conforming to Type VI, classes 10 and 15 of DDD-L-20. The fastness to wet-dry cleaning requirements of DDD-L-20 shall apply. The inscription and format for the trousers shall be as follows:

NAME:  
 SERVICE NO.:  
 TROUSERS, MEN'S, (BLUE, ENLISTED)  
 FIBER CONTENT: 100% WOOL  
 CONTRACT NO.: DLA 100-00-0-0000 (Example)  
 NAME OF CONTRACTOR:  
 NAME OF MANUFACTURER: (If other than contractor)

CLEANING INSTRUCTIONS

DRY CLEAN ONLY  
 DO NOT REMOVE THIS LABEL  
 PRESS GARMENTS INSIDE OUT

3.3.9.1 Size label. A separate size label conforming to type VI, class 2 of DDD-L-20 shall indicate the size and stock number as follows:

STOCK NO.: 8405-00-000-0000 (Example)  
 SIZE: 34 R (Example)

Note: The lengths (Extra-Short, Short, Regular, Long, and Extra-Long) may be abbreviated as XS, S, R, L, or XL.

3.3.9.2 Removable size ticket. Each trouser shall have a commercial type size ticket attached to the outside of the waistband, centered on the left back. The ticket shall be 3 inches long and 1 inch high, made of a suitable plain white cardboard. The corners of the ticket may be double perforated for ease in tacking. The size (38R - Example) shall be printed or stamped on the upper left hand corner in black or blue ink. The lettering for the size shall be 1/4 inch in height. Abbreviations for lengths shall be allowed in accordance with 3.3.9.1.

3.4 Design. The trousers shall have a 13-button broadfall front opening, a laced placket type opening at the waist on center back, two horizontal hanging front pockets, one horizontal hanging hip pocket, bell bottoms legs with no outseams (one piece leg). Leg bottoms shall be overedged (see figure 1).

3.4.1 Figure. The figure is furnished for information purposes only. When inconsistencies exist between the specification and the figure, the specification shall govern.

## MIL-T-87038D(NU)

\* 3.5 Patterns. Standard patterns to be used to cut working patterns will be furnished by the Government (see 6.3). The patterns allow 3/8 inch seam allowance for all seams, except as otherwise indicated in Table II. The working patterns shall be identical to the Government patterns. Neither the Government patterns nor the working patterns shall be altered in any way, except that additional notches for use during construction are allowed on the working patterns. Also, minor modifications are permitted when using automatic equipment. These modifications shall not alter the dimensional, serviceability, or appearance requirements cited in the specification.

3.5.1 List of pattern parts. The component parts of the trousers shall be cut from materials as specified and in accordance with the pattern parts required for the manufacturing process as follows:

TABLE I - List of Pattern Parts

MATERIAL	NOMENCLATURE OF PATTERN PARTS	CUT PARTS
Basic Material	Leg - front and back (1-piece)	2
	Broadfall facing	1
	Waistband	2
	Facing (back-placket opening)	2
	Gusset (back opening)	1
	Front pocket facings	2
	Back pocket facing (right side)	1
	Crotch piece (size 32 and up) (optional)	2
Twill cloth	Broadfall facing lining	1
	Waistband lining	2
	Front pocket	2
	Back pocket	1
Markers and shaper (templates)	Buttonhole (broadfall)	-
	"V" stitch marker (broadfall)	-
	"V" stitch marker (gusset)	-

3.6 Construction.

## MIL-T-87038D(NU)

\* 3.6.1 Stitches, seams, and stitchings. Stitch, seam, and stitching types specified in Table II shall conform to FED-STD-751. Whenever two or more methods for seam or stitch types are given for the same part of the operation any one of them may be used. Seam allowance shall be maintained with seams sewn so that no raw edges, runoffs, twists, pleats, puckers or open seams result. All seams shall start and finish evenly. Thread tension shall be maintained so that there is no tight or loose stitching. Where stitch type 401 is used, the looper (underthread) shall be on the inside of the trousers. Ends of all seams produced by stitch type 401 shall be caught in other seams or stitchings. Unless otherwise specified, double needle stitching shall be 1/4 inch gauge with the outer row of stitching 1/16 to 1/8 inch from the finished edge. Top stitching and edge stitching shall be 1/16 to 1/8 inch from the edge. During the overedge operations, a knife shall be used for trimming off only the loose thread ends. The bight of the overedge stitching shall be 3/16 inch. Bartacks shall be 1/8 (+ 1/32) inch wide.

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

\* 3.6.1.2 Thread breaks and ends of seams. Ends of seams and stitching when not caught in other seams or stitchings shall be backtacked not less than 3/8 inch with no thread floats. Overedge stitching, when not caught in other seams and stitchings, shall have a 1/4 inch chain that extends beyond the ends. The ends of a continuous line of stitching shall be overlapped not less than 1/2 inch. The ends of label stitching shall be overlapped not less than 3 stitches. Thread breaks (all stitch types) shall be repaired by stitching back of break not less than 1/2 inch. Skipped stitches or thread breaks on 401 stitch type may be repaired by using 301 stitch type. A seat seam must be completely resewn.

3.7 Buttonhole. The buttonhole shall be an eyelet-end, cut before, square-bar type, reinforced with well worked over gimp, gimp pull through to the underside and with the stitching securely caught in the fabric. The end of the buttonhole shall be bar tacked by a separate machine operation. The bartack shall securely catch the ends of the gimp and covering the width of the of the buttonhole at the end. The purling shall finish on the outside. The finished cut length shall be 3/4 inch.

3.8 Shade and size marking. The component parts shall be marked or ticketed to insure a uniform shade and size throughout the trousers. Any method may be used except:

- (a) Corrosive metal fastening devices.
- (b) Sew-on shade tickets.
- (c) Adhesive type tickets, which leave traces of paper or adhesive on material after removal of tickets.

Note: The use of ink pad numbering machine, rubber stamp or pencil is acceptable provided the numbers do not show through the outside of the trousers and the numbers shall be covered by the seam allowance

## MIL-T-87028D(NU)

\* 3.9 Manufacturing operations requirements. The trousers shall be manufactured in accordance with operation requirements specified in Table II. The contractor is not required to follow the exact sequence of operations provided the finished trousers are identical to that produced by following the sequence listed in Table II. Minor modifications are permitted where necessary when using automatic equipment. These modifications shall not alter the dimensional, serviceability, or appearance requirements cited in the specification.

3.9.1 Pressing. All pressing required in Table II shall be performed with a heated pressing iron or machine.

3.9.2 Abbreviations in table of operations. The abbreviations used in Table II are as follows:

Stch	-	stitch
in	-	inch
Ndl	-	Needle
Bob	-	Bobbin
Lpr	-	Looper
Mchne	-	Machine
Brtck	-	Bartack
Comrci	-	Commercial
smlar	-	similar
Btrhl	-	Buttonhole
incl	-	including
dbl	-	double

MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr
1.	<u>Cutting trousers.</u>				
	<p>a. Cut trousers in strict accordance with patterns furnished which show size, placement of pockets, directional lines and notches for proper assembling of cut parts. Lay fronts and back so that the directional line is in the warp direction. The directional line on the fronts and backs may vary from the warp direction by not more than 1 inch. Measurement shall be taken from the top and bottom of the directional line on pattern to the selvage edge of the fabric and the difference between the two measurements shall not exceed the tolerance specified. The use of perforated markers are prohibited.</p> <p>b. Cut all parts of the trousers out of one piece of material, except gusset on back opening, back placket facing, and pocket facings, which may be cut from ends. Parts cut from ends shall approximate the shade of trousers.</p> <p>c. Cut the twill cloth lining in accordance with furnished patterns. The waistband (bias-cut) may be strip cut and placed on rolls.</p>				
2.	<u>Replacement of defective components.</u>				
	<p>During the spreading, cutting and manufacturing process, components having material defects or damages that are classified as defects in MIL-STD-1488 and section 4 shall be removed from production and replaced with non-defective and properly matched components.</p>				
3	<u>Shade and size marking (see 3 8)</u>				
	<p>a. All parts shall be marked or ticketed to insure a uniform shade, size and proper assembly throughout the garment, except those parts cut from ends which shall approximate the shade of the trousers.</p>				

MIL-T-8703BD(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr	
4.	<u>Edge finishing.</u>					
	NOTE: Extreme caution should be taken to minimize fraying of the edges prior to finishing.					
	a. All exposed raw edges (except leg bottoms) in the finished trousers shall be bound (see 3.3.3). The binding shall finish 3/16 to 1/4 inch wide.	301 or 401	BSc-1	12-14	50 50	50 70
*	b. As an alternate, the raw edges of the seat seam, inseams, gusset, gusset facing, and optional crotch piece may be overedged.	503 or 504 or 602	EFD-1	8-10	70	70
	c. Overedge stitch the leg bottoms.	503 or 504 or 602	EFD-1	8-10	70	70
5.	<u>Make front.</u>					
	a. Prepare fronts for broadfall opening by stitching center front seam, face to face, from crotch seam to top of trousers, 3/8 (+ 1/16) inch from edge.	301 or 401	SSad-3(a)	12-14	50 50	50 70
	b. Press seam open and flat.					
	c. Double stitch the 1/2 inch wide tape 3/8 inch gauge, from top of trousers to crotch seam centered over the seam.	301 or 401	SSad-3(b)	12-14	50 50	50 70
6.	<u>Make and attach broadfall facing.</u>					
	a. Stitch facing and lining together, back to back, around sides and bottom edges 1/8 to 3/16 inch from raw edge. Trim excess lining if necessary.	301 or 401	SSa-1	12-14	50 50	50 70
	b. Bind sides and bottom edges of broadfall facing assembly.	301 or 401	BSc-1	12-14	50 50	50 70
	c. Mark broadfall opening according to pattern marks on inside of trousers panels. Position broadfall facing assembly, face to face, to outside of trousers with top aligned and all parts smooth and flat, according to marks on patterns, making sure front seam of trousers corresponds with center notch of broadfall assembly. Notches for slit opening on broadfall assembly are for approximate location only.					

## MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr	
d.	Stitch 3/8 inch from raw edge along top of trouser broadfall between opening marks.	301 or 401	SSa-1	12-14	50	50
e.	Stitch or double stitch 1/4 inch gauge along opening marks (stitching shall be uniformly gauged with opening marks).	301	SSv-1	12-14	50	50
f.	Slash between double stitching (operation e.). Trim corners of broadfall opening. Turn broadfall to finish position working out corners and edges.					
g.	Double stitch top and sides of broadfall opening stopping stitching even with bottom of opening and backstitch. Ends of stitching shall finish under crowtack (operation 15c).	301	SSe-3(b)	12-14	50	50
NOTE:	The corners at top of broadfall opening shall be square mitered and can be accomplished with a double needle split bar machine.					
h.	Fold back wing portion of broadfall facing assembly, overlapping ends at center front matching notches. The top of facing shall be aligned with top of trouser broadfall. Align edges of the broadfall slit opening, ensuring that all parts lay smooth and flat (see note). Double stitch through all plies (front and broadfall assembly), the outer edge of broadfall slit opening from top of trousers to base of opening and back stitch. End of stitching shall finish under crowtack (see operation 15c)	301	smlar to SSe-3(b)	12-14	50	50

NOTE: Not more than a 1/4 inch gap is permitted between broadfall and trouser edge.

## MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr
	i. Place "V" stitch marker on front with bottom line of marker on bottom of opening. Mark and double stitch around marker uniformly from top of trousers down slit opening, up on broadfall, across broadfall, down slit opening on broadfall, and up to top of trousers in one continuous operation. Row of vertical stitching farthest from side edges of broadfall opening of applicable trouser sizes shall be located as follows: Sizes 26 thru 30 - 1-3/4 (+ 1/8) inches, Sizes 31 thru 50 - 2 (+ 1/8) inches. The stitching shall form a uniform "V" centered under the slit opening with the point on a line 1-1/2 (+ 1/8) inches below the end of each broadfall slit opening.	301 or 401	SSv-2	12-14	50 50 50 70
	NOTE: The double stitching shall be straight, evenly gauged, and corners squared with no thread floats.				
	<u>Make and attach pockets (2 front and 1 right back).</u>				
	a. Overedge the bottom raw edge of pocket facing.	503 or 504 or 602	EFd-1	8-10	70 70
	b. Stitch facing to top edge of pocket piece, 1/4 inch from the edge.	301 or 401	SSa-1	12-14	50 50 50 70
	c. Stitch lower edge of facing, 1/4 inch from serged edge, to pocket piece.	301 or 401	LSa-1	12-14	50 50 50 70
	d. The finished facings shall measure 1-1/4 (+ 1/4) inches wide.				

MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread	
					Ndl	Bob/ Lpr
	e. Stitch unfaced end of pockets to top edge of trousers as indicated by pattern notch on top of trouser panel. The back pocket has two notches for placement and size. The front pockets have only one notch on the trouser panel. Using this notch, measure toward the center front on the broadfall facing the applicable length cited in operation 7.h and establish the second notch (template or gauge may be used). Clip notches the depth of the seam allowance, turn to underside and double stitch across the pocket opening.	301 or 401	SSe-3	12-14	50	50 70
	f. Stitch a combination label on all four sides with label centered on underside of back pocket. Top edge of label shall be 3-1/2 (+ 1/2) inches from bottom finished edge of pocket. Label shall face the trousers when worn.	301	LSbj-1	12-14	50	50
	g. Fold pockets in half upwards, and stitch and overedge stitch sides. This operation may be accomplished simultaneously or by two separate operations.	301 or 401 and 503 or 504 or 602 or 515 or 516 or 519	SSa-1	12-14	50 50	50 70 70 70
*	h. The finished pocket measurements for the applicable trouser sizes shall be as follows:					
	<u>Front</u>					
	Sizes 26 thru 30					
	Opening - 4-1/4 (+ 1/4) inches					
	Depth - 6 (+ 1/4) inches					
	Sizes 31 thru 50					
	Opening - 5-1/4 (+ 1/4) inches					
	Depth - 6 (+ 1/4) inches					
	<u>Back hip</u>					
	Sizes 26 thru 30					
	Opening - 3-5/8 (+ 1/4) inches					
	Depth - 6 (+ 1/4) inches					
	Sizes 31 thru 50					
	Opening - 4-1/4 (+1/4) inches					
	Depth - 6 (+1/4) inches					
8.	<u>Place hanger hoops.</u>					
	a. The hanger loops shall be centered on top of each trouser panel. The loops shall be folded in half and stay stitched in place.	301	SSa-1	12-14	50	50

MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr	
	OR					
	b. The hanger loop may be placed during operation 9d. and need not be stay stitched.					
	c. The finished loop shall have a 1-1/4 (+ 1/4) inch free opening.					
*9.	<u>Set up and attach waistband.</u>					
	a. Tack or stitch gusset facing to waistband at center back, face to face, to maintain proper position.	301 or tack	SSa-1	3-6	50	50
	b. If not creased, crease the bottom of the waistband lining.					
	c. Stitch waistband lining to waistband, 1/4 inch seam allowance, along top and front edge, face to face, catching top of gusset. Note: At this point, gusset facing is between lining and waistband.	301	SSe-2(a)	12-14	50	50
	d. Stitch lower edge of waistband to trouser, 1/4 to 3/8 inch from edge, securely catching pockets, pocket facings, and hanger loops in the seams. Turn seam allowance up into waistband.	301	SSa-1	12-14	50	50
	e. Stitch gusset/waistband assembly to center back seam, along the length of gusset facing.	301	SSe-2(a)	12-14	50	50
	f. Turn gusset/waistband assembly to finished position. Edge stitch top and front ends of waistband, 1/16 to 1/8 inch from folded edge.	301	SSe-2(b)	12-14	50	50
	g. Topstitch waistband joining seam (with seam allowance turned into waistband), catching the waistband lining and the top of the pockets in the stitching.	301 or 401	Similar to SSq-2(b)	12-14	50 50	50 70
	h. Stitch top edge of size label to the lower edge of the waistband lining above the left front pocket. The ends of the stitching need not be tacked provided the stitching extends at least 1/2 inch beyond each side of label. The stitching shall not be through the printing.	301	Lsa-1	12-14	50	50

## MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr
1. Edgestitch, 1/16 to 1/8 inch, center back opening from top of waistband to step.		301	SSe-2(b)	12-14	50 50
j. Finished width of waistband shall measure 1-7/8 (+ 1/8) inches.					
k. Finished width of waistband lining shall measure 2-3/8 (+ 1/8) inches.					
10. <u>Make eyelets on back opening.</u>					
a. Circular type, 3/16 inch (inside diameter) eyelets shall be positioned on both sides of the back opening as indicated below. The purling shall be on the inside.		Eyelet		22 per eyelet (min).	
<u>Waistband eyelets</u>					
- Top eyelet, 1/2 inch from the side and top edge.					
- Second eyelet, 1/2 inch from the side and 3/4 inch below top eyelet.					
<u>Lower gusset eyelets</u>					
- The third eyelet shall be 1/2 inch from lower edge of waistband and side edges. The remaining eyelets shall be 1/2 inch from side edges and 9/16 inch down from the third and each other. The number of eyelets listed below indicates the number on each side of opening (excluding waistband) for applicable trouser sizes:					
<u>Sizes</u>	<u>Number of eyelets</u>				
26 thru 30	4				
31 thru 34	5				
35 thru 50	6				
NOTE: Measurement for placement of eyelets shall be taken from center of eyelet, with a +1/16 inch tolerance.					
b. Clean all eyelets of loose thread and fabric.					

## MIL-T-87038D(NU)

TABLE 11 -- CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread	
					Ndl	Bob/ Lpr
11.	<u>Join backs.</u>					
	a. Join the two back pieces, face to face, and stitch seat seam from crotch to bottom of back opening at the step. Press seams open and flat.	301 or 401	SSa-1	12-14	50	50 70
	b. Crotch piece (optional) - Crotch pieces, when used for trouser sizes 32 and above, shall be stitched to back pieces as indicated by pattern marks; spread seams open and double stitch 3/16 inch gauge.	301 or 401	SSz-3	12-14	50	50 70
12.	<u>Join inseams.</u>					
	Stitch inseams 3/8 inch from the edge matching notches at the knee as indicated on pattern. Press seam open and flat.	301 or 401	SSa-1	12-14	50	50 70
13.	<u>Tape back seam.</u>					
	a. Double stitch the 1/2 inch wide tape, 3/8 inch gauge, from top of trousers at bottom of back gusset over inseam onto tape of front approximately 1 inch. Fold end of tape under 1/4 to 1/2 inch superimposed on tape in operation 5c. Raw ends of tape shall be concealed.	301 or 401	SSad-3	12-14	50	50 70
	b. Bartack across width of tape 1/8 to 3/8 inch from folded edge.	Brck		21 per brck (min)	50	70
14.	<u>Attach gusset piece (back opening).</u>					
	a. Fold top of gusset to underside 3/8 (+ 1/8) inch and double stitch turned edge, 3/16 to 1/4 inch gauge.	301 or 401	Efa-2	12-14	50	50 70
	b. Place gusset piece across back opening on underside with edge of gusset overlapping edge of facing 1/16 to 1/8 inch and double stitch to back edge of facings through back forming a uniform "V" across seat seam according to marker. Top of gusset piece shall be 1/4 to 3/8 inch below top of waistband and the bottom point 1-1/2 (+ 1/4) inches below the end of the back opening. The outer row of the double stitching shall be 1/8 to 3/16 inch from the edge.	301 or 401	LSa-2	12-14	50	50 70

MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread	
					Ndl	Bob/ Lpr
NOTE: The point of the design "V" stitch shall be centered on the seat seam.						
*	c. Finished width of gusset piece at top for applicable trouser sizes shall measure: Sizes 26 thru 30 - 4 5/8 (+ 1/4) inches; 31 thru 34 - 5 (+ 1/4) inches; 35 thru 50 - 5-1/2 (+ 1/4) inches. The opening between top of waistband at gusset shall measure 1 (+ 1/4, - 0) inches.					
15.	<u>Sew bartacks and crowsacks.</u>					
	a. Stitch 1/2 inch long vertical bartacks at each end of the pocket openings, extending across the double stitching to the edge of the waistband seams.	Brtck		28 per brtck (min)	50	70
	b. Buttonhole bartacks (1/4 inch long) shall be stitched across the end of the buttonhole and shall not exceed the width of the buttonhole stitching (operation 16.b.).	Brtck		21 per brtck (min)	50	70
	c. Make a uniform crowsack at the bottom of each side of broadfall opening and one at the bottom of back opening. The crowsack shall measure 3/4 (+ 1/16) inch between tips at the two opposite but horizontally positioned rays. The crowsacks with three pointed rays shall be stitched with the center ray pointed vertically downwards and the two outer rays pointed horizontally.	Crowsack		126 per crowsack (min)	50	70
16.	<u>Mark and sew buttonholes.</u>					
	a. Buttonholes shall be 3/4 inch, eyelet end, cut first, square bar reinforced with well worked over gimp with the stitching securely caught in the fabric. The purling shall finish on the outside. The gimp shall be pulled through to the inside.	Btnhl		45-50 per btnhl	50	70

## MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr
b. The ends of all buttonholes shall be bartacked by machine securely catching ends of gimp and covering the width of the bar. Bartacking shall be a separate operation (operation 15.b.).	Brtck			21 per 50 brtck (min)	
c. Buttonholes shall be marked and positioned as follows:					
1. Thirteen on the broadfall, as indicated by pattern marker. The eyelet end of the buttonhole shall be 1/2 to 5/8 inch from the finished edges of broadfall, when measured from center of the eyelet.					
2. One on left waistband, placed horizontally 3/4 (+ 1/8) inch from the finished top edge and 1/2 (+ 1/8) inch from the finished front edge of waistband.					
3. One on left broadfall assembly, placed horizontally 3/4 (+ 1/8) inch from the bottom of waistband and 3/8 (+ 1/8) inch from front edge of broadfall assembly in line with buttonhole in waistband.					
d. All thread ends shall be trimmed and buttonholes cleaned.					
17. <u>Attach buttons.</u> Buttons shall be sewn on wings and right waistband in alignment with buttonholes in broadfall assembly and left waistband. The crown on the anchor shall point downward. The stitching shall follow the sewing guide grooves of the buttons. All stitches shall be in the button's grooves (vertical when worn) except for the cross-over stitch.	101 or 301			20-22 30 per btn 14-16 30 30 per btn	

NOTE: Buttons with proper shank length shall be sewn through all plies of material without catching the pockets, and without distortion to buttoning area. All buttons shall be securely shank wrapped with thread ends tacked off.

## MIL-T-87038D(NU)

TABLE II - CONSTRUCTION OF TROUSERS

No.	Operation	Stch Type	Seam/ Stch type	Stch in	Thread Ndl Bob/ Lpr
18.	<u>Cleaning, pressing, lacing and finishing.</u>				
	a. Remove all shade tickets.				
	b. Remove all spots, stains and lint formation.				
	c. Trim thread ends and remove all loose ends of thread both inside and outside.				
	d. Insert laces into one bottom eyelet of back opening and secure with single knot (see figure 1).				
	e. Button the two broadfall buttons at top corners of broadfall and two center buttons; and press top of trousers only.				
	f. Turn trousers inside out. Crease inner and outer legs neatly. The crease on the inner leg shall be along the back side the overedge stitching and shall be on the back part of the leg.				
	g. Remove gloss and impressions.				
*	h. Attach removable size ticket to outside of waistband, centered on the left back, tacking all four corners of ticket.	Hand or Machine	2-4 stitches per tack 6-8 stitches per tack		

NOTE: (1) Care shall be taken when trimming thread ends that damage to the fabric does not result.

(2) When buck pressing, apply vacuum only after unlocking. When automatic press is used, apply bottom steam and dry only.

(3) If impressions and gloss occur, the buck may be lowered in that area without locking, and the garments may be steamed and dried.

## MIL-T-87038D(NU)

3.8 Sizes and measurements. Unless otherwise specified, finished measurements of trousers shall be listed in Table III. All measurements and tolerances are expressed in inches.

Table III - Sizes and measurements

Size	Waist	Seat	Knee	Leg Bottom	Inseam - unhemmed (E)				
	(A)	(B)	(C)	(D)	X-Short	Short	Regular	Long	X-Long
26	26	33	22-3/8	23-7/8	31	33	35	37	39
27	27	34	22-3/8	23-7/8	31	33	35	37	39
28	28	35	22-5/8	24-1/8	31	33	35	37	39
29	29	36	22-5/8	24-1/8	31	33	35	37	39
30	30	37	22-7/8	24-3/8	31	33	35	37	39
31	31	38	22-7/8	24-3/8	31	33	35	37	39
32	32	39	23	24-3/8	31	33	35	37	39
33	33	40	23-1/4	24-5/8	31	33	35	37	39
34	34	41	23-1/4	24-5/8	31	33	35	37	39
35	35	42	23-1/2	24-7/8	31	33	35	37	39
36	36	43	23-1/2	24-7/8	31	33	35	37	39
37	37	44	23-3/4	25-1/8	31	33	35	37	39
38	38	45	23-3/4	25-1/8	31	33	35	37	39
40	40	46	24	25-5/8	-	33	35	37	39
42	42	47	24-3/8	25-3/4	-	33	35	37	39
44	44	48	24-3/8	25-3/4	-	33	35	37	39
46	46	50	24-5/8	26	-	33	35	37	39
48	48	52	24-5/8	26	-	33	35	37	39
50	50	54	24-5/8	26	-	33	35	37	39

Tolerances									
	+ 1/2	+ 1	+ 1/2	+ 1/2	+ 3/4	+ 3/4	+ 3/4	+ 3/4	+ 3/4

NOTE: Refer to Figure 1 for A, B, C, D, and E measurements. All measurements shall be taken with trousers laid out smooth and flat. Measurements for the waist and seat shall be taken with trousers fully buttoned and laced in back.

- A. Waist - Twice the measurement taken from folded edge to folded edge across the top edge of waistband. For measurement purposes the edges of the back opening shall be abutted.
- B. Seat - Twice the measurement taken across the width of trouser front (folded edge to folded edge), located from a point measured down from the bottom of waistband seam (measure along each side fold) the following length in inches:

## MIL-T-87038D(NU)

Sizes	X-Short	Short	Regular	Long	X-Long
26 thru 29	5	5-1/2	6	6-1/2	7
30 thru 33	5-1/2	6	6-1/2	7	7-1/2
34 thru 38	6	6-1/2	7	7-1/2	8
40 thru 44	-	7	7-1/2	8	8-1/2
46 thru 50	-	7-1/2	8	8-1/2	9

- C. Knee - Twice the measurement taken from folded edge to folded edge across the width of trouser leg. Location of knee measurements shall be taken from bottom of trousers legs as follows:
- |                     |                        |
|---------------------|------------------------|
| X-Short - 18 inches | Long - 21-1/4 inches   |
| Short - 19 inches   | X-Long - 22-3/4 inches |
| Regular - 20 inches |                        |
- D. Bottom - Twice the measurement taken from folded edge to folded edge across unhemmed (overedged) bottom of leg.
- E. Inseam - Length measurement taken along inseam from crotch seam to overedged bottom of legs.

3.9 Workmanship. The finished trousers shall conform to the quality and grade of product established by this specification. As a final step in the contractor's product control plan before formation of a lot, each dress trouser shall be examined after pressing and prior to folding for packaging, and a trouser containing a selected defect shall not be included in the end item lot. Selected defects are those defects listed in MIL-STD-1488 and section 4.4.2 indicated by an asterisk (\*). The occurrence of defects shall not exceed the applicable acceptable point value of defect limit.

#### 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 (examination 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 assure supplies and services conform to the prescribed requirements.

## MIL-T-87038D(NU)

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 acceptance of defective material.

4.1.2 Certificate of compliance. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

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

1. First article inspection (see 4.3).
2. Quality conformance inspection (see 4.4).

4.3 First article inspection. When required, the first article submitted in accordance with 3.2 shall be inspected for compliance with design, construction, workmanship, appearance, and dimensional requirements.

4.4 Quality conformance inspection. Inspection shall be performed in accordance with MIL-STD-1488 and 4.4.2, except where otherwise indicated.

4.4.1 Component and material inspection. In accordance with 4.1 above, components and materials shall be inspected and tested in accordance with the requirements of referenced specifications, drawings, and standards unless otherwise amended, excluded, modified or qualified in this specification or applicable purchase document. In addition, the contractor shall furnish a certificate of compliance stating that the lace conforms to the requirements specified in 3.3.5 (see 4.1.2).

4.4.2 End item examination. Examination of the end item shall be performed in accordance with the provisions for (D) trousers in MIL-STD-1488 and in accordance with the list below.

## MIL-T-87038D(NU)

Defect	Point Value
--------	-------------

## BUTTONS

- |   |   |
|---|---|
| a. Shank wrapping omitted or not trimmed to less than 1/4 inch:       |   |
| 1. Less than six buttons  | 1 |
| 2. More than six buttons  | 2 |
| b. Not aligned or misplaced with buttonholes causing bulges or twist: |   |
| 1. Less than three buttons  | 1 |
| 2. More than three but less than six buttons                          | 2 |
| 3. Six or more buttons  | 3 |
| c. Bottom of anchor not pointing downward                             | 2 |
| d. Button stitching (other than cross-over stitch) not in grooves     | 2 |

## BUTTONHOLES

- |   |   |
|---|---|
| a. Ragged edges, i. e., yarns or thread ends on inside of buttonholes not trimmed to less than 1/4 inch or basic fabric not caught by buttonhole stitching: |   |
| 1. One or more but less than six buttonholes  | 1 |
| 2. Occuring in six or more buttonholes  | 2 |
| b. Buttonholes out of alignment with each other by more than 1/8 inch.  | 1 |

## EYELETS

- |   |   |
|---|---|
| a. Not specified type or size, stitching incomplete, purling on wrong side, one or more broken or two or more skipped stitches. | 2 |
| b. Eyelet misplaced.  | 2 |
| c. Fabric not completely cut from center of eyelet of two or more eyelets.  | 1 |
| d. Thread not cut to within 1/4 inch on two or more eyelets.  | 1 |

## CROWTACK

- |   |   |
|---|---|
| a. Missing, not secured, not serving intended purpose or not specified type or size   | 2 |
| b. Misplaced, i. e., center ray not in vertical alignment with opening or side rays not perpendicular with opening in a horizontal plane or not at base of opening. | 2 |

## MIL-T-87038D(NU)

Defect	Point Value
c. Repaired crowsack damages material.	2
d. Center back crowsack not at bottom of back opening.	1
<b>BACK OPENING</b>	
a. Gusset exposed above top edge of waistband.	1
b. Finished width of gusset not as specified (measured at top).	2
c. Measurement of opening (from tip to tip) not as specified.	2
d. Gusset not overlapping facing or overlapping by more than 1/8 inch.	2
e. Point of design stitching not centered on seat seam.	1
<b>BROADFALL</b>	
a. Top edge of broadfall 1/4 inch or more above or below waistband joining seam when buttoned.	2
b. Side opening of broadfall not uniformly spaced from top to bottom by more than 1/4 inch.	2
c. Side opening of broadfall overlapping front of trousers.	2
d. Facing exposed beyond edge of broadfall.	1
<b>*BINDING (OR OVEREDGING)</b>	
a. One raw edge not bound or overedged.	1
b. Two or more raw edges not bound or overedged.	2
c. Width of finished binding not as specified.	1
<b>SEAMS</b>	
a. Reinforcement tape omitted	3
b. Reinforcement tape not securely caught in seams.	2
c. Reinforcement tape not centered on seam or not finished as specified.	1

## MIL-T-87038D(NU)

Defect	Point Value
--------	-------------

## DESIGN STITCHING

- |   |   |
|---|---|
| a. Double stitching design stitching not uniformly gauged for a distance of one inch or more. | 1 |
| b. Design stitching not according to template or not correct distance from broadfall opening. | 1 |
| c. Stitching at corners not at a 90 degree angle (squared).                                   | 1 |
| d. Corners of stitching having floats.  | 2 |
| e. Stitch tension incorrect (too much thread on surface of fabric or back of fabric).         | 1 |
| f. Run-off on corners in excess of two stitches.  | 2 |
| g. Gusset "V" stitching not according to template.  | 2 |

## POCKETS

- |   |   |
|---|---|
| a. Pockets too full or tight causing gapping or fullness. | 2 |
| b. Top edge caught in waistband seam.                     | 1 |

## PRESSING

- |                                     |   |
|-------------------------------------|---|
| a. Gloss or impressions not removed | 2 |
|-------------------------------------|---|

---

4.4.3 Packaging inspection. Packaging inspection will be in accordance with MIL-STD-1488.

## MIL-T-87038D(NU)

4.4.4 Palletization examination. An examination shall be made to determine that the palletization complies with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one palletized unit load fully packaged. The lot size shall be the number of palletized unit loads in the end item inspection lot. The inspection level shall be S-1 and the Acceptable Quality Level, AQL, expressed in terms of defects per hundred units, shall be 6.5 in accordance with MIL-STD-105.

<u>Examine</u>	<u>Defects</u>
Finished dimensions	Length, width, or height exceeds specified maximum requirements.
Palletization	Pallet pattern not as specified. Interlocking of loads not as specified. Load not bonded with required straps 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-packaging. Preservation-packaging shall be level A or C as specified (see 6.2).

5.1.1 Level A. Each pair of trousers, turned inside out, shall be folded as follows:

a. Fold trousers in half lengthwise with the seat inside of the fold, so that the trousers form a straight line.

b. Fold trousers in thirds across the length so that the folded dimensions are approximately 11-1/2 by 15 inches. Note: For the longer trousers lengths it may be necessary to fold up the bottom of the trousers legs 4 to 8 inches before folding trousers into thirds.

c. Each folded pair of trousers shall be individually packaged in a clear snug-fitting polyethylene bag. The polyethylene film shall be 0.00125 inch (+ 20% tolerance) thickness. All seams and closures shall be formed by heat sealing. A 1/4 inch diameter hole shall be made at one corner of the polyethylene bag to allow excess air to escape. As an alternate, the polyethylene bag may be of the tuck-in or reverse flap type, and the heat seal closure and corner hole are not required. The final closure of the bag shall be made with the flap tucked in or reversed.

5.1.2 Level C. Trousers shall be packaged to afford adequate protection against physical damage during shipment from the supply source to the first receiving activity. The package and the quantity per package shall be the same as that normally used by the contractor for retail distribution.

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

## MIL-T-87038D(NU)

5.2.1 Level A. Eight (8) pairs of trousers, of one size and length only, packaged as specified in 5.1.1, shall be stacked flat in the container, with the waistband alternated end to end and length of the trousers parallel to the end panels of the box. The fiberboard shipping container shall conform to class weather-resistant, type CF, variety DW, grade V15c, size 1A of MIL-B-17757. The fiberboard for the liner shall conform to type CF, class domestic of MIL-B-17757. Each container shall have the contents completely covered on the top and bottom with a sheet of commercial grade kraft paper.

5.2.2 Level B. Eight (8) pairs of trousers, of one size and length only, packaged as specified in 5.1.1, shall be stacked flat in the container, with the waistband alternated end to end and the length of the trousers parallel to the end panels of the box. The fiberboard shipping container shall conform to class domestic, type CF, variety DW, grade 200, size 1A of MIL-B-17757. The fiberboard for the liner shall conform to class domestic, type CF, of MIL-B-17757. Each container shall have the contents completely covered on the top and bottom with a sheet of commercial grade kraft paper.

5.2.3 Level C. Trousers, packaged as specified in 5.1, shall be packed in a manner to insure carrier acceptance and safe delivery at destination at the lowest transportation rate for such supplies. The quantity per shipping container shall be the same as that normally used by the contractor for retail distribution. Containers shall comply with the U.S. Postal Service Manual, Uniform Freight Classification Rules of National Motor Freight Classification Rules as applicable.

5.3 Palletization. When specified (see 6.2), item, packed as specified in 5.2, shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Each prepared load shall be bonded with primary and secondary straps in accordance with the bonding means C and D or Film bonding F or G. Pallet patterns shall be in accordance with the appendix of MIL-STD-147. The pallet shall be 4-way, type IV, type V, class 1, size 2; or type VIII, fabricated from wood groups I, II, III or IV, grade A of NN-P-71, or 4-way, style 1, size A, type I, class 1 fabricated from wood group specified, of MIL-P-15011. Interlocking of loads shall be effected by reversing the pattern of each course. If the container is of a size which does not conform to any of the patterns specified in MIL-STD-147, the pallet pattern used shall first be approved by the contacting officer.

\* 5.4 Marking. In addition to any special marking required by the contract or order, unit packs, intermediate or exterior containers and palletized unit loads shall be marked in accordance with MIL-STD-129.

\* 5.5 MIL-STD-2073. When specified (see 6.2), Preservation and Packing shall be in accordance with MIL-STD-2073-1 and MIL-STD-2073-2.

## MIL-T-87038D(NU)

## 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 trousers are intended for use as part of the blue dress uniform worn by enlisted male personnel of the Navy.

\* 6.2 Acquisition requirements. Acquisition documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Sizes and lengths 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 first article is required (see 3.2 and 4.3), the item will be tested and should be a first article sample. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, quantity and testing and approval of the first article.
- (e) Selection for applicable levels of packaging and packing (see 5.1 and 5.2).
- (f) When palletization is required (see 5.3).
- (g) When all packaging data is to be found in MIL-STD-2073-1 and MIL-STD-2073-2

6.3 Samples and patterns. For access to samples and patterns, address the procuring activity issuing the invitation for bids (see 3.1 and 3.5).

6.4 Subject term (key words) listing.

Bottoms, bell  
 Pants, dress  
 Pants, polyester/wool  
 Uniform, man's  
 Uniform, sailor's

6.5 Changes from previous issue. The margins of this specification are marked with an asterisk 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 notation. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodian:  
 Navy - NU

Preparing activity:  
 Navy - NU

Review Activity:  
 DLA - CT

Project No. 8405-N111

MIL-T-87038D (NU)

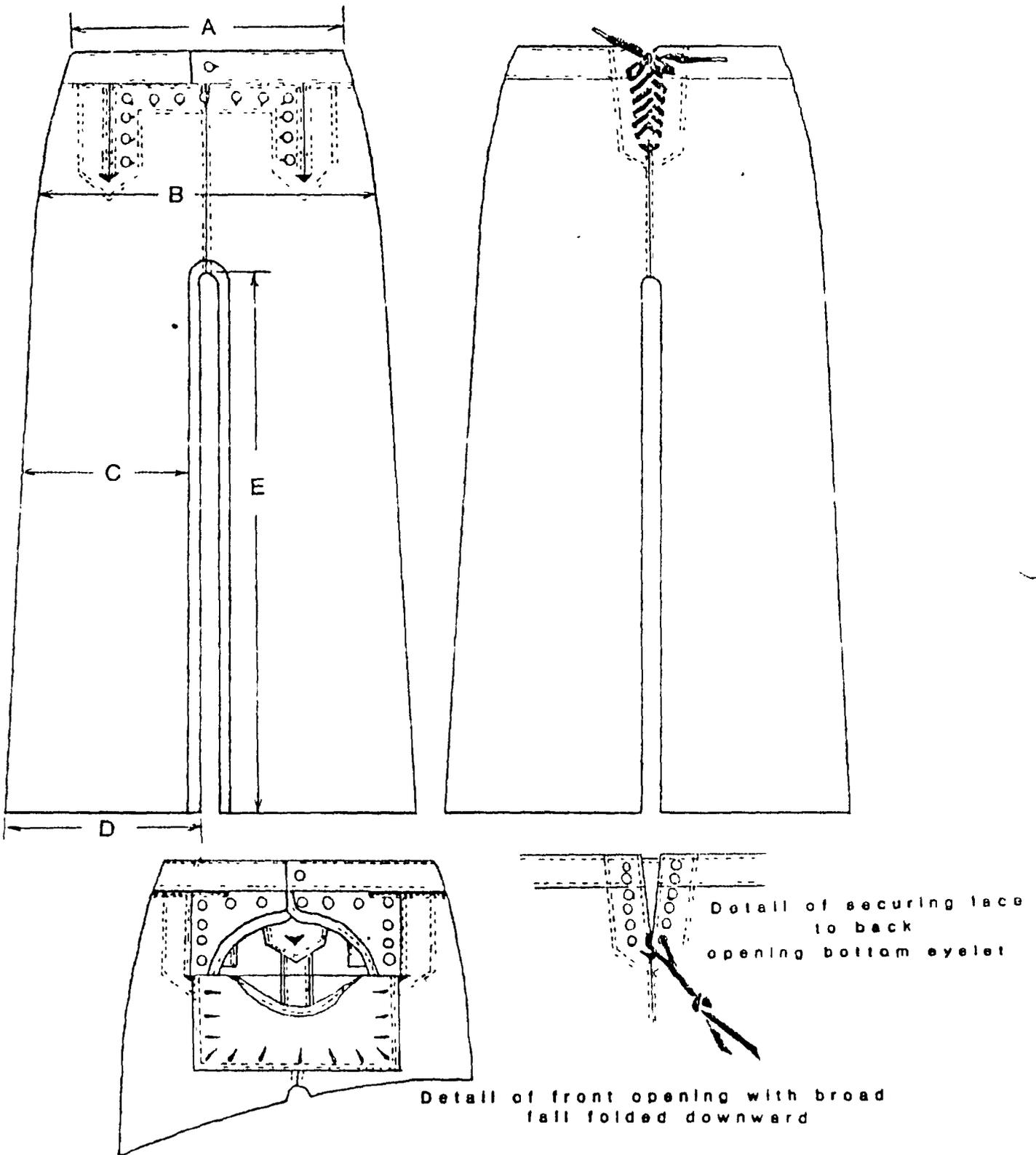


FIGURE 1 - TROUSERS, MEN'S (BLUF, ENLISTED)

**INSTRUCTIONS:** In your continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvement. All holders of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (*DO NOT STAPLE*), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 80 days to let you know that your comments were received and are being considered.

**NOTE.** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

(Fold along this line)

(Fold along this line)

DEPARTMENT OF THE NAVY



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

**BUSINESS REPLY MAIL**  
FIRST CLASS PERMIT NO 12503 WASHINGTON D C

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE NAVY

Navy Clothing and Textile Research Facility  
21 Strathmore Road, (Code 50)  
Natick, MA 01760-2490

