

INCH-POUND

MIL-DTL-82161C(MC)

28 July 1997

SUPERSEDING

MIL-T-82161B(MC)

28 March 1994

## DETAIL SPECIFICATION

### TROUSERS, MEN'S - EVENING DRESS (OFFICER'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. Scope. This specification covers requirements for officer's evening dress trousers.

1.2. Classification. The trousers will be of one type in the following sizes, as specified (see 6.2).

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 8405

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

## MIL-DTL-82161C(MC)

<u>Schedule of sizes</u>										
Waist (inches)	26	28	30	32	34	36	38	40	42	44
	29	29	29	29	29	29	29			
Inseam lengths (inches)	31	31	31	31	31	31	31	31	31	31
		33	33	33	33	33	33	33		
		35	35	35	35	35	35	35		

1.3. Individual orders. When trousers are custom tailored to an individual order, this specification shall govern, except the detail requirements of Section 3, Table I may be modified to the extent necessary for good custom tailoring practice.

## 2. APPLICABLE DOCUMENTS

2.1. General. 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 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

## SPECIFICATIONS

### FEDERAL

- A-A-50186 - Cloth, Buckram, Woven and Nonwoven
- A-A-50196 - Thread, Silk
- A-A-50198 - Thread, Gimp, Cotton, Buttonhole
- A-A-52071 - Tape, Textile, Cotton, General Purpose,  
(Unbleached, Bleached or Dyed)

MIL-DTL-82161C(MC)

A-A-52094	- Thread, Cotton
A-A-52106	- Cloth, Twill or Plain Weave, Polyester and Polyester Blend
DDD-L-20	- Label: For Clothing, Equipage, and Tentage, (General Use)
V-B-871	- Button, Sewing Hole, and Button, Staple, (Plastic)
V-F-106	- Fastener, Slide, Interlocking

DEPARTMENT OF DEFENSE

MIL-C-368	- Cloth, Satin, Rayon and Cloth, Twill, Rayon
MIL-DTL-20271	- Lace, Gold - Ornamental
MIL-C-29405	- Cloth, Broadcloth: Wool and Wool/Nylon

STANDARDS

FEDERAL

FED-STD-751	- Stitches, Seams and Stitchings
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DEPARTMENT OF DEFENSE

MIL-STD-1488	- Provisions for Evaluating Quality of Trousers
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(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. Non-Government publications. 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).

## MIL-DTL-82161C(MC)

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. Standard sample. Standard samples are furnished solely for guidance and information to the contractor (see 6.3). Variations from this specification may appear in the sample, in which case the specification shall govern.

3.2. First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.3.

#### 3.3. Materials.

3.3.1 Basic material. The basic material and reinforcement patches for the leg bottoms shall be cloth, wool, broadcloth, dark blue, shade 2307, conforming to type I of MIL-C-29405.

3.3.2 Lining. The material for lining the waistband and right fly shall be cloth, rayon, twill, black, 3.7 ounce, conforming to class 1 of MIL-C-368.

3.3.3 Pocketing, lining, and interlining. The material for lining the pockets, waistband, right fly, pocket flaps, crotch, left fly interlining, and pocket stay shall be black polyester, polyester and cotton or polyester and rayon conforming to class 1 of A-A-52106.

3.3.4 Buckram. The material for interlining waistbands shall be cloth, buckram, cotton, natural shade, conforming to type I of A-A-50186.

3.3.5 Stay tape. The tape for the front edge of the side pocket shall be cotton, 1/4 inch wide, conforming to type II, class 1 of A-A-52071.

3.3.6 Hook and eye. The hook and eye shall be 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 or #85 eye); Akim Co. or Patwin, Inc., Junior Series, type JB; Stimpson (P-536, D-4086, D-4457, D-4288); Rau (OA50, OX 1256, 080416), Patwin, Inc.

## MIL-DTL-82161C(MC)

(Slim-Slak with MB eye, and Slik-Slak) or equal. The finish shall be nickel plate. Prior to the use of an "or equal" item, the supplier shall submit the item with supporting data to the contracting officer for approval.

3.3.7 Lace. The lace for the outseams of the trousers shall be lace, gold, ornamental, conforming to class 3 of MIL-DTL-20271.

3.3.8 Slide fastener. The slide fastener for the fly shall conform to type I, style 1, brass, natural finish, size LS, with the short tab pull as specified in V-F-106. The tape shall show good fastness to wet (dry) cleaning. The color of the tape shall be black, shade G, cable No. 66507.

3.3.9 Thread and gimp.

3.3.9.1. Thread. All outside seaming and stitching shall be performed with silk thread conforming to type I of A-A-50196 and all other seaming and stitching with cotton thread conforming to A-A-52094.

Operation	Type	Ticket No.	Ply	Material	Needle or Bobbin
Topstitching	--	A	3	Silk	Needle
	III	A	3	Cotton	Bobbin
Inseaming, outseaming, seat seaming	III	A	3	Cotton	Both
Bartacks, inside	II	40	3	Cotton	Bobbin
Bartacks, outside	--	A	3	Silk	Needle
Serging	II	70	2	Cotton	Both
Buttonholes	--	A	3	Silk	Bobbin
	III	A	3	Cotton	Needle
Buttons	II	24	4	Cotton	Both
All other seaming and stitching	I	40	3	Cotton	Both

3.3.9.2. Gimp. The buttonhole gimp shall be cotton, ticket No. 8, soft or glazed finish, conforming to type I or II of A-A-50198.

3.3.9.3. Color. The color of thread and gimp shall be black, shade AA, cable No. 66043 and the color of the top thread of the bartacks at the ends of side pocket openings and the thread used for stitching the ornamentation to the trousers shall be yellow

## MIL-DTL-82161C(MC)

(goldenlite), shade AJ, cable No. 66051 for the gold lace (see DoD Standard Color Card of Official Standardized Shades for Sewing Threads 1968).

3.3.9.4. Colorfastness. The thread and gimp shall show good fastness to wet (dry) cleaning and, in addition, the silk thread shall show good fastness to light when tested as specified in applicable thread specifications.

3.3.10 Buttons. Buttons shall conform to type II, class D, glossy finish, style 4, 22 line and 27 line of V-B-871. The color of the buttons shall be black, shade BT (see DoD Standard Shades for Buttons 1966).

3.3.11 Labels. Each pair of trousers shall have a combination personal-identification-size-instruction label. The combination label shall conform to type VI, class 14 of DDD-L-20. The label shall conform to the colorfastness and writing test requirements of DDD-L-20. The content (inscription) and format of the combination label shall be as follows:

Nomenclature:

Fiber Content:

Size:

Contract number:

Name of contractor:

DRY CLEAN ONLY

3.4. Design. The trousers shall be the U.S. Marine Corps design as shown on Figures 1 and 2, having a two-piece lined waistband with outlet at center back, button french-type fly with slide fastener closure, hip darts, two watch pockets and finished leg bottoms. The trousers shall have ornamental gold lace, attached at the outseams.

3.5. Patterns. Standard patterns will be furnished to the contractor by the Government. The standard patterns shall not be altered in any way and shall be used only as a guide for cutting the supplier's working patterns. The contractor's working patterns shall be identical to the standard patterns. The standard patterns provide a 1/2 inch allowance for crotch seam and 3/8 inch allowance for all other seams, except as otherwise specified herein, and seat seam outlet at waist in accordance with patterns. The patterns provide a three inch allowance for

## MIL-DTL-82161C(MC)

bottom turnup of legs. The standard patterns show size, directional lines for cutting, and are marked and notched for proper placement and assembly of the component parts.

3.5.1 List of pattern parts. The component parts for the trousers shall be cut from the specified materials in accordance with the pattern parts indicated below:

ITEM	PATTERN NOMENCLATURE	NO. OF CUT PARTS
	Material: Basic	
1.	Front	2
2.	Back	2
3.	Right fly	1
4.	Left fly	1
5.	Reinforcement patch	4
6.	Facing, watch pocket	2
7.	Waistband	2
8.	Buttonhole tab	2
	Material: Cloth, twill, polyester, polyester and cotton or polyester and rayon	
9.	Watch pocket	4
10.	Crotch lining	2
11.	Left fly interlining	1
	Material: Cloth, rayon, twill	
12.	Right fly lining	1
13.	Waistband lining	2
	Material: Cloth, buckram, cotton	
14.	Waistband interlining	2
	Marker	
15.	Bottom turnup marker	

### 3.6. Construction

3.6.1 Manufacturing requirements. The trousers shall be manufactured in strict accordance with the operations and the stitch, seam, and stitching types specified in Table I. The supplier is not required to follow the exact sequence of the operations listed in Table I, but all operations specified shall be used to manufacture the trousers.

## MIL-DTL-82161C(MC)

3.6.1.1. Stitches, seams and stitchings. The stitch, seam, and stitching types specified in Table I shall conform to FED-STD-751.

3.6.1.2. Overedge stitching. Overedge or serge stitching shall be done on serging machines with knife attachment properly set to trim the raw edge when overedged without cutting the material.

3.6.1.3. Tacking and backstitching. Ends of seams and stitching produced with stitch type 301, when not caught in other seams or stitching, shall be backtacked not less than 1/4 inch. Thread breaks (all stitch types) shall be secured by stitching back of break not less than 1/2 inch. When stitch type 401 is used, ends of seams and stitching shall be caught in other seams or stitching, and skipped stitches and thread breaks may be repaired using stitch type 301 backstitched not less than 1/2 inch on each side of the skip or break.

3.6.2 Shade marking. The component parts of the trousers shall be shade marked to ensure a uniform shade and size throughout the garment. 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 discolorations or leave traces of paper or adhesive mass on the material upon the removal of the tickets.



## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
1	<p><u>Cutting.</u></p> <p>a. Cut the trousers in strict accordance with the patterns furnished by the Government.</p> <p>b. Cut the material in the direction indicated by directional lines on the patterns. Lay fronts and backs so that the directional lines are in the warp direction. The directional lines may deviate from the warp direction by not more than 1 inch on both fronts and backs. Measurements shall be taken from the top and bottom of the directional line on patterns to the selvage edge of the fabric and the difference between the two measurements shall not exceeds the tolerance specified.</p> <p>c. Cut the component parts for the trousers from one piece of the basic material, except the following parts may be cut from ends but when so cut, the parts shall harmonize with the shade of the trousers: left and right flies, and fly buttonhole tab.</p> <p>d. Cut the ornamental stripes to the required length.</p>					
2	<p><u>Replacement of damaged parts.</u></p> <p>a. Replace any part containing damages at time of cutting, such as holes or serious weakening defects such as smashes, multiple floats and slubs likely to develop into holes.</p> <p>b. Replace any part damaged during the manufacturing process by needle chews which may be expected to develop into a hole, scissors or knife cuts, tears, holes, mends or burns, and large exposed drill holes.</p>					

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## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
5	<u>Make left fly.</u> (cont'd)					
	a. Position slide fastener on fly and interlining material with bottom end of chain 1/4 to 1/2 inch above the fly notch. The front edge of chain shall be 5/8 to 3/4 inch from front edge of finished fly at top, tapering from 3/8 to 1/2 inch at the bottom. Seam fastener tape to fly through the interlining with a double row of stitches 3/16 to 1/4 inch gage.	301 or 401	LSbj-2	12-16	A	A
	b. Overedge the back edge of left fly and fly interlining together.	503 or 504	SSa-1	6-10	70/2	70/2
6	<u>Make buttonhole tab for right fly.</u>					
	Finished appearance. The buttonhole table shall finish without distortion, with the buttonhole stitching securely caught in the fabric and with the seams finished at the edge of the tab.					
	a. The tab shall be made of two plies of basic material.					
	b. Seam the plies together at top, front and bottom edges with 3/16 to 1/4 inch seam and turn, forming out all edges.	301	SSe-2 (a)	12-16	A	A
	c. Topstitch the tab 1/16 to 1/8 inch from the seamed edges.	301	SSe-2 (b)	12-16	A	A
	d. Make a 5/8 inch long, horizontal, eyelet-end, taper-bar type buttonhole through the center of tab with edge of eyelet 1/2 ± 1/8 inch from finished end of tab. The buttonhole shall be well worked over gimp to fit a 22 line button and with the purling on inner side of tab.	Button - hole		48 min per button -hole (incl. tack)	A	A (silk )
7	<u>Make right fly.</u>					
	Finished appearance. The right fly shall finish without bulkiness, twists, puckers, or pleats.					

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
7	<p><u>Make right fly.</u> (cont'd)</p> <p>a. The fly shall consist of one ply of basic material, a buttonhole tab and the lining.</p> <p>b. Position the buttonhole tab on the outside of the fly, with raw edges even and the upper finished edge of tab in line with the notch in the upper front edge of fly.</p> <p>c. Seam fly and lining together 3/16 inch from front edge. The seam shall extend from the bottom edge of fly up to the upper edge of buttonhole tab, catching the tab in the stitching.</p> <p>d. In the finished trousers, the upper end of the lining shall extend to top of waistband over the waistband lining, and the lining extension piece at the lower end shall extend not less than 1/2 inch beyond inseam.</p>	301	SSe-2 (a)	12-16	40/3 or A	40/3 or A
8	<p><u>Assemble right and left flies.</u></p> <p>Finished appearance. The flies shall be of even length where they join the crotch seam. The fastener parts shall be set so that there is no twisting or puckering when fly is closed.</p> <p>a. Position flies with notches at lower end matching, and seam fastener tape to back edge of right fly, stitching 1/4 inch from edge.</p>	301	SSa-1	12-16	A	A
9	<p><u>Make watch pockets and attach label.</u></p> <p>Finished appearance. The watch pocket bearer and watch pocket halves shall be properly positioned and securely sewn without pleats, puckers, or other distortions.</p> <p>a. The watch pocket shall be made of two pieces of pocketing material and a facing consisting of one ply of basic material.</p>					

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
9	<u>Make watch pockets and attach label.</u> (cont'd)					
	b. Position the bearer over one ply of pocket material with the upper edges even. Turn under the lower edge of bearer and seam to the pocket 1/8 inch from the folded edge. A selvage edge need not be turned.	301	LSd-1	12-16	A	A
	c. Stitch label to outside of the front half of one watch pocket on all four sides. Position of label on finished trousers shall be centered, 1/2 inch below the finished pocket opening.	301	SSa-1	12-16	40/3	40/3
	d. Properly position front and back pieces of the pocket with edges even and join together at the side and bottom edges with a 1/4 inch seam. The stitching shall extend from notch to notch at upper side edges.	301	SSe-2 (a)	12-16	40/3	40/3
	e. Turn the pocket, forcing out the seamed edges. Topstitch the pocket uniformly 1/4 inch from the seamed edges.	301	SSe-2 (b)	12-16	40/3	40/3
10	<u>Make waistband lining.</u>					
	Finished appearance. The waistband lining shall be without distortion.					
	a. The waistband lining shall be made of one ply of lining material and one ply of buckram.					
	b. Overlap lining material on buckram 3/4 inch and stitch 1/8 to 3/16 inch from edge of lining material. Fold lining material over buckram and press.	301 or 401	LSa-1	6-10	40/3	40/3
	- or -					
	c. Use a commercial, buckram interlined, waistband lining, provided the furnished lining conforms to specification requirements.					

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
11	<u>Seam crotch lining to fronts.</u>  a. The crotch lining shall consist of lining material and shall extend not less than one inch above fly notch.  b. Fold crotch lining lengthwise to form a double thickness and seam to fronts or attach to fronts in the overedge operation.	301 or 503 or 504	SSa-1  EFd-1	12-16  6-10	A  70/2	A  70/2
12	<u>Seam darts in back.</u>  Finished appearance. The darts shall be properly positioned and finished without pleats, puckers, or gathers. In the finished trousers, the darts shall be well tapered to a flat point at lower end and shall extend to the pocket opening.  a. Fold the backs, matching the cut edges of the waist darts. Seam lengthwise along the entire length of the dart, starting 3/8 inch from the cut edges at the top end and tapering to a point at the lower end as indicated by marks on patterns.  b. Spread open and press darts smooth and flat with heated pressing iron or pressing machine.	301	SSa-1	12-16	A	A
13	<u>Attach watch pockets.</u>  Finished appearance. The completed watch pocket openings shall not be stretched and the material shall not be exposed on the outside.  a. Position the pockets on the outside of the fronts at the pocket notches for the pocket openings. Seam the front part of the pocket only to the front of trousers 3/8 inch from the top edge, from notch to notch.	301	SSe-2 (a)	12-16	40/3	A

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
13	<u>Attach watch pockets.</u> (cont'd)					
	b. Extend depth of notches to the seam. Turn the pocket to the inside of the front of trousers and edgestitch the pocket opening 1/8 inch below the top edge.	301	SSe-2 (b)	12-16	40/3	A
	c. Securely tack the ends of the pocket opening through front of trousers and front and back of pocket.	301	SSa-1	12-16	A	A
	d. In the finished trousers, the notches for the pocket opening shall not be exposed and the edge of the opening shall meet the lower edge of the waistband. The pocket opening (after bartacking) shall be $2-7/8 \pm 1/8$ inches and the depth of the pocket shall be $3-3/4 \pm 1/4$ inches.					
14	<u>Join fly assembly to fronts.</u>					
	Finished appearance. The seam joining the fly assembly to the front shall be without pleats, puckers, twists, or other distortions.					
	a. Sew on left fly with 3/8 inch seam with notches matching.	301	SSa-1	12-16	A	A
	b. Turn left fly to the inside with joining seam 1/8 inch back of folded edge and press front edge without damage to the fastener.					
	c. Sew on right fly with 3/8 inch seam with notches matching.	301	LSq-2 (a)	12-16	A	A
	d. Press right fly seam open and flat with heated pressing iron with the fastener tape facing towards side seam.					
15	<u>Join outseams.</u>					
	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.					

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
15	<u>Join outseams.</u> (cont'd)  a. Join the outseam with a 3/8 inch seam, matching the notches as indicated by marks on the patterns.  b. Spread open the outseams from top edge of trousers to bottom and press smooth and flat with a heated pressing iron or pressing machine.	301 or 401	SSa-1 (b)	12-16	A	A
16	<u>Attach ornamentation.</u>  Finished appearance. Ornamentation shall be centered over the outseam on the trousers from top edge of trousers to bottom edge of legs, with the top end to finish in the waistband seam. The ornamentation shall be securely and uniformly stitched, properly positioned and shall finish without distortion.  a. Stitch the ornamentation to the trousers, from top to bottom 1/16 to 1/8 inch from each edge of braid.	301	SSas-4 (b)	12-16	A (silk )	A (silk )
17	<u>Sew waistband to trousers.</u>  Finished appearance. The waistband shall be seamed to the trousers smoothly and neatly without fullness, gathers, or pleats.  a. The waistband shall be made of one ply of basic material.  b. Seam waistband to trousers 3/8 inch from edge.  c. The raw right front ends of the waistband shall extend 1/4 to 3/8 inch beyond the front edge of the right fly. The left front ends of the waistband shall finish even with the back edge of the left fly. The raw right and left back ends of the waistband shall finish even with the edges of the back.	301	SSa-1	12-16	A	A



## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
18	<u>Press waistband seam.</u>  a. Press waistband seam open and flat with a heated pressing iron or pressing machine.					
19	<u>Attach hooks and eyes.</u>  Finished appearance. In the finished trousers, when hook and eye is engaged, the closure shall not bulge, pucker or twist.  a. Position the hook at the center 1/4 inch (6.4 mm 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.  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.					
20	<u>Seam front ends of waistband.</u>  a. Turn back right fly lining and stitch top end to front and top edges of waistband, down to the buttonhole tab, rounding off the corner slightly. Trim the corner.  b. Turn back the end of the left waistband in line with the joining seam of the left fly to front and stitch across top edge of waistband the width of the fly.	301          301	SSe-2 (a) (each edge)     SSa-1	12-16       12-16	A       A	A       A
21	<u>Join lining to waistband.</u>  a. Insert top edge of waistband between lining and buckram of waistband lining, with edge of lining turned in, and join all plies with a row of imitation handfelled stitches, or trouser waistband lining may be felled by hand.	304 or 404 or Hand		12-16  12-16  7-10	40/3  40/3  40/3	40/3  40/3  

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
21	<u>Join lining to waistband.</u> (cont'd)  b. Left end of waistband lining shall finish at front edge of trousers, with the end of the waist- band lining trimmed slightly back from front edge on an angle. Right end of waistband lining shall extend approximately one inch under the fly lining in the finished trouser.					
22	<u>Press waistband.</u>  a. Turn out front end of left and right waistband, forcing out the corners. Turn waistband lining to inside the press along the top edge of waistband. Trouser waistband lining shall not be exposed beyond top edge of waistband.  b. Finished width of waistband shall be $1-3/4 \pm 1/8$ inches.					
23	<u>Finish left fly.</u>  Finished appearance. The base of the fly should be finished so as to avoid twisting, pleating or puckering. The joining seam of left fly to front shall not be exposed on outside of trouser.  a. Seam back edge of left fly to front from notch to top of waistband uniformly $1-1/2 \pm 1/8$ inches from front edge to fly.	301	SSa-1	12-16	A (silk )	A
24	<u>Finish right fly.</u>  a. Turn to the inside and edgestitch right fly lining front and top edges of right fly and through the buttonhole tab $1/8$ inch from edge.  The lining shall not be exposed on the outside of the trousers.  b. Turn under the raw edge of fly lining and raise stitch the fly joining seam, catching the turned under portion of lining and slide fastener tape in the stitching.	301           301	SSe-2 (b) (show finished seams)       LSg-2 (b)	12-16       12-16	40/3       A (silk )	A       40/3

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
25	<p><u>Join inseam.</u></p> <p>Finished appearance. Inseams shall be carefully joined with notches matching and without twists or puckers. The seams shall start and finish evenly and be smooth and flat.</p> <p>a. Join the inseam from the bottom edge of the legs to the crotch with the notches matching as indicated by marks on the patterns, forming an outlet tapering the seam allowance of the back from 1-1/8 inches at the crotch to 3/8 inch at the knee notch.</p> <p>b. Press the inseam open.</p>	401	SSa-1	12-16	A	A
26	<p><u>Join crotch and seat seam.</u></p> <p>Finished appearance. The crotch and seat seams shall be joined with proper tension, resulting in sufficient elasticity of seam to counteract strain encountered in sitting or stooping. In the joining of the seat seam, the inseams shall meet.</p> <p>a. Measure waist to proper size before joining crotch, seat, and waist seam.</p> <p>b. Place the left and right assemblies together with the edges of the crotch seam aligned with the waistband on the left assembly, aligned with the waistband on the right assembly at the fly opening, and with the notches at the lower end of the flies matching.</p> <p>c. Join the left and right assemblies at the crotch and seat seam from the fly notch to a point 1/2 to 3/4 inch from the top of the finished waistband with two rows of stitches not more than 1/32 inch apart, forming a 1/2 inch V-shaped opening at back. The left and right assemblies shall be joined at the crotch with a 1/2 inch seam.</p>	401	SSa-2	10-14	A	A

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
26	<u>Join crotch and seat seam.</u> (cont'd)  d. Fold back waistband lining over the joining seat seam and single stitch each end of the outlet 1/4 inch from seat seam, with the lower corner diagonally folded and caught in the stitching. Turn and force out upper corners.	301	SSa-1 (each end)	12-16	A	A
27	<u>Assemble slide fastener.</u>  a. Attach slider and securely staple bottom of fastener together with the ends of the chain even and the head of the staple towards the outside.					
28	<u>Press seams (with heated pressing iron or pressing machine).</u>  Finished appearance. The seams shall finish smooth and flat without pleats, puckers or twists.  a. Spread open the seat and crotch seams from top of waistband to fly notch and press smooth and flat.					
29	<u>Stitch right fly lining extension to crotch seams.</u>  a. Turn under raw edge of the right fly lining extension and stitch by machine or hand fell to each side of the crotch seam.  b. The right fly lining shall extend not less than 1/2 inch beyond the inseam in the finished trousers.	301 or Hand	SSa-1 (each edge)	12-16  6-8	40/3  0 (silk )	A

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
30	<u>Finish waistband.</u>  Finished appearance. The waistband shall finish smooth, even and flat without gathers, puckers, pleats, or other distortions either in the waistband or the trousers at waistband joining. On the finished trousers, the waistband shall be uniformly $1\text{-}3/4 \pm 1/8$ inches wide and the waistband lining shall finish $2\text{-}1/2 \pm 1/8$ inches wide.					
30	<u>Finish waistband.</u> (cont'd)  a. Topstitch the waistband seam $1/16$ inch from joining seam on trousers side (not through waistband), catching waistband lining. The stitching shall extend to the stitching on the left (not across) fly and to back edge of right fly.	301	LSd-2 (show finished seam)	12-16	A (silk )	40/3
31	<u>Bartack trousers.</u>  Finished appearance. The trousers shall not be distorted by the bartacks. The watch pockets shall lie smooth and flat. The bartacks shall be properly positioned and correctly placed to reinforce the points of strain as specified.  a. Bartack both ends of all watch pocket openings. Bartacks for the watch pockets shall be vertical.	Bartack		28 per bartack	A (silk )	40/3
	b. Bartack the bottom end of the fly horizontally through all plies at the juncture of the crotch seam and fly.	Bartack		28 per bartack	A (silk )	40/3
	c. Bartack front edge of right fly to back of left fly with a vertical bartack, with lower end of bartack approximately $3/4$ inch above the horizontal bartacks at base of fly.	Bartack		28 per bartack	0	40/3
	d. Bartacks shall be made $3/8$ to $1/2$ inch long, and shall be stitched through all plies of material at the point of bartacking.					

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
32	<u>Sew buttons to trousers.</u>  Finished appearance. The buttons shall be securely sewn with the ends of the stitchings securely tacked. The buttons shall be properly aligned with the buttonholes to secure a smooth and complete closure without bulging or misalignment.					
32	<u>Sew buttons to trousers.</u> (cont'd)  a. Sew a 22-line button through the waistband lining only in line with the buttonhole in the right tab.  b. Sew six 27-line buttons on the inside of the waistband lining only. One button shall be positioned over each of the side seams, one button on each front 4-1/2 to 4-3/4 inches from the side seam and one on each of the backs 2-1/4 to 2-3/8 inches from the back seam. The center the buttons shall be positioned 1/2 to 5/8 inch below top of waistband.  c. Shank wrap all buttons.	101  or 301    101  or 301  or Hand   Hand		20-22 per button 14-16 per button 4 per button (doubl e thread )  20-22 per button 14-16 per button 4 per button (doubl e thread )  4 wraps per button (doubl e thread ) 16  stitch -es per button	24/4  24/4  24/4  24/4  24/4  24/4  24/4  24/4	24/4             24/4

## MIL-DTL-82161C(MC)

TABLE I. Manufacturing requirements - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/I N	NDL	BOB/ LPR
33	<u>Press trousers.</u>  Finished appearance. All pressing shall be done with a heated pressing iron or pressing machine of a type suitable to obtain the desired appearance in accordance with good manufacturing practice.  a. Press the top, and fly smooth and flat.  b. Press smooth and crease the legs in the center, with the seams matching the bottom and in the crotch, or the inseam in the crotch may be slightly back of the outseam.  c. Close fly and waistband.					
34	<u>Finish leg bottoms.</u>  Finished appearance. The turnup shall finish 2-3/4 to 3 inches deep with the reinforcement patches positioned at the inside bottom of center front and back without distortion.  a. Mark the trouser leg for bottom turnup in accordance with the pattern marker.  b. Turn all trousers wrong side out. Turn up bottom end of leg and blindstitch to body of leg.  c. Turn trousers right side out to complete pressing.	301	EFc-1	6-8	A	A
35	<u>Clean trousers.</u>  a. Trim all ends of stitching and remove all loose threads; and remove all spots, stains, and shade tickets or markings without injury to the material.					

3.7. Finished measurements. The finished trousers shall conform to the measurements shown in Table II.

TABLE II. Finished Measurements. 1/

## MIL-DTL-82161C(MC)

Size (inches)	26	28	30	32	34	36	38	40	42	44	Tolerance
1/2 Waist <u>2/</u>	13	14	15	16	17	18	19	20	21	22	$\pm 1/4$
Inseam <u>3/</u>	----- As marked on label. -----										$\pm 1/2$

1/ The trousers shall be fastened and placed flat upon a table except as otherwise indicated herein.

2/ Waist measurement taken from folded edge to folded edge on waistband with waistband buttoned.

3/ Inseam measurement taken along inseam from crotch seam to bottom edge of legs.

3.8. Workmanship. The finished trousers shall conform to the quality and grade of product established by this specification.

3.9. Recycled, recovered, or environmentally preferable materials. 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. Classification of inspection. The inspection requirements specified herein are classified as follows:

- a. First article inspection (see 4.3).
- b. Conformance inspection (see 4.4).

4.2. Inspection conditions. Unless otherwise specified, all inspections shall be performed in accordance with the test conditions specified in MIL-STD-1488.

4.3. First article inspection. When first article is required, inspection shall be made of completely fabricated trousers for all provisions of this specification.

#### 4.4. Conformance inspection.

4.4.1 In-process inspection. Inspection shall be performed during the manufacturing of the end item to ascertain that the



## MIL-DTL-82161C(MC)

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.

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

4.4.3 Finished measurement examination. The provisions for the finished measurement examination of the finished trousers shall be as specified in MIL-STD-1488 and as outlined in Table II.

4.4.4 Examination of packaging requirements. The examination for compliance with packaging, packing, and marking requirements shall be as specified in MIL-STD-1488.

## 5. PACKAGING

5.1. Packaging. 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. Intended use. The trousers are intended for wear by officers of the U.S. Marine Corps.

6.2. Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of the specification.

MIL-DTL-82161C(MC)

- 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. Sizes and lengths required (see 1.2).
- e. Whether first article is required (see 3.2).
- f. Number of trousers in first article (see 3.2).

6.3. Standard sample. For information regarding the availability of standard samples and patterns, address inquiry to the procuring activity issuing the invitation for bids.

6.4. Figures. Figures 1 and 2 show the general design of the trousers and are furnished for information only. In the event of conflict between the figures and the text of this specification, the specification will govern.

6.5. Subject term (keyword) listing.

Blue  
Broadcloth  
Cloth  
Wool

6.6. Changes from previous issue. 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. 8405-N312

MIL-DTL-82161C(MC)

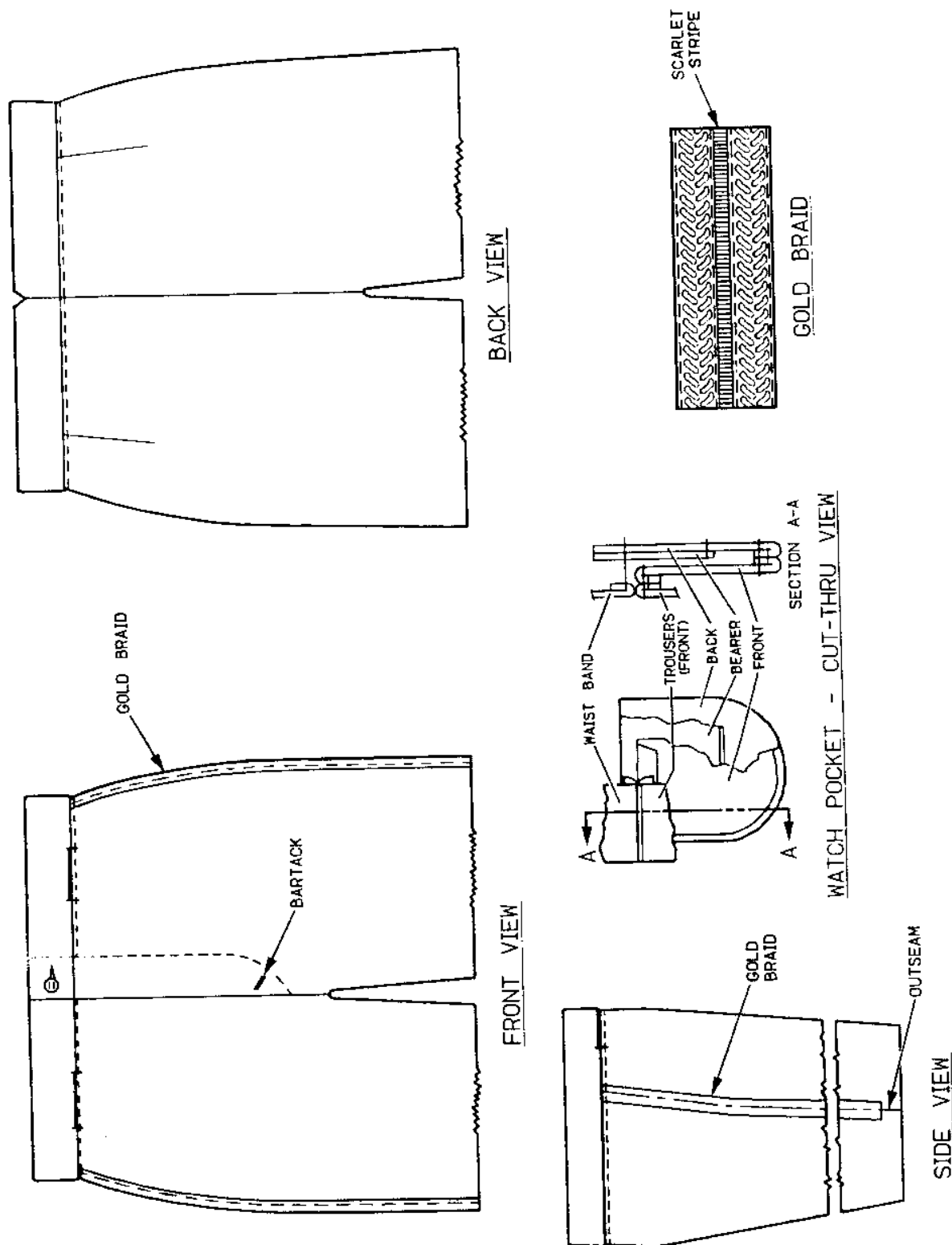


Figure 1. Trousers, Men's - Evening Dress (Officer's)

MIL-DTL-82161C(MC)

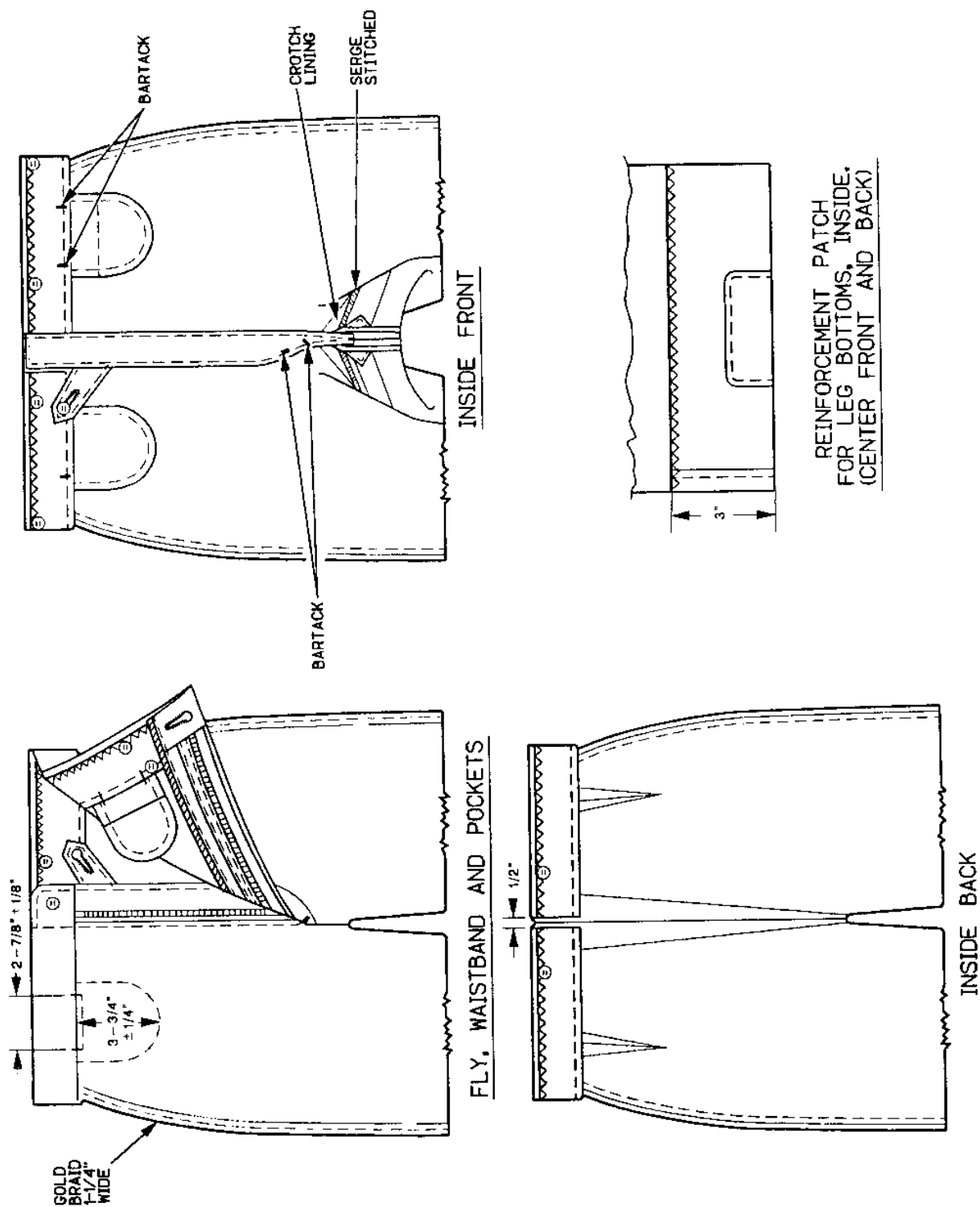


Figure 2. Trousers, Men's - Evening Dress (Officer's)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

## INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

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

### I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER  
MIL-DTL-82161C

2. DOCUMENT DATE (YYMMDD)  
970728

3. DOCUMENT TITLE TROUSERS, MEN'S - EVENING DRESS (OFFICER'S)

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

### 5. REASON FOR RECOMMENDATION

### 6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)  
(1) Commercial  
(2) AUTOVON  
(if applicable)

7. DATE SUBMITTED  
(YYMMDD)

### 8. PREPARING ACTIVITY

a. NAME  
COMMANDER, MARCORSYSCOM, PSE-D

b. TELEPHONE Include Area Code)  
(1) Commercial (2) AUTOVON  
(703) 784-4584 278-4584

c. ADDRESS (Include Zip Code)  
2033 BARNETT AVE, SUITE 315,  
QUANTICO, VA 22134-5010

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5203 Leesburg Pike, Suite 1403, Falls Church, VA 22401-3466  
Telephone (703) 756-2340 AUTOVON 289-2340