

INCH-POUND

MIL-DTL-82194C(MC)

29 July 1997

SUPERSEDING

MIL-O-82194B(MC)

28 February 1994

DETAIL SPECIFICATION

ORNAMENTATION - FOR JACKET, MAN'S, EVENING DRESS, OFFICERS'

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 ornamentation components for the men's evening dress jacket.

1.2. Classification. The ornamentation will be of the following types and classes, and sizes, as specified (see 6.2). Type II and III ornamentation will be furnished in pairs, right and left, for all types.

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 8455

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

MIL-DTL-82194C(MC)

Type I - Collar ornamentation

Class 1 - Standard (2 inch finished width of collar).

Class 2 - Special (1-3/4 inch finished width of collar).

Schedule of sizes

16	16-1/2	17	17-1/2	18	18-1/2
----	--------	----	--------	----	--------

Type II - Shoulder strapSchedule of sizes

5-1/4	5-3/8	5-1/2	5-5/8	5-3/4	5-7/8
-------	-------	-------	-------	-------	-------

Type III - Sleeve ornamentation

Class 1 - General Officer Insignia

Class 2 - Field Grade Officer Insignia

Class 3 - Company Grade Officer Insignia

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).

MIL-DTL-82194C(MC)

SPECIFICATIONS

FEDERAL

- A-A-50186 - Cloth, Buckram, Woven and Nonwoven
- A-A-50196 - Thread, Silk
- DDD-L-20 - Label: For Clothing, Equipage and Tentage
(General Use)
- V-T-295 - Thread, Nylon

DEPARTMENT OF DEFENSE

- MIL-C-368 - Cloth, Satin, Rayon and Cloth, Twill, Rayon
- MIL-DTL-3461 - Button, Insignia, Metal, Uniform and Cap
- MIL-E-17568 - Embroidery Materials, Metallic and
Synthetic Metallic
- MIL-C-29405 - Cloth, Broadcloth: Wool and Wool/Nylon
- MIL-DTL-82193 - Jacket, Man's - Evening Dress (Officer's)

STANDARDS

FEDERAL

- FED-STD-191 - Textile Test Methods

(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).

ANSI/ASQC Z1.4 - Sampling Procedures and Tables for
Inspection by Attributes

(Application for copies should be addressed to The American National Standards Institute, 11 West 42nd Street, New York, NY 10036)

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

MIL-DTL-82194C(MC)

(Copies may be obtained from the Color Association of the United States, Inc., 409 W. 44th Street, New York, NY 10016-0927)

2.4. Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1. Standard sample. Standard samples are furnished solely for guidance and information to the contractor (see 6.3). Variation from this specification may appear in the sample, in which case 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 Background material. The background material for all types of ornamentation shall be cloth, broadcloth, wool, dark blue, shade 2307 conforming to type I of MIL-C-29405.

3.3.2 Embroidery materials. The synthetic gold embroidery materials used in fabrication of ornamentation items shall conform to type III, classes 8 or 11 of MIL-E-17568.

3.3.2.1. Synthetic gold border. The border used to outline the scarlet silk embroidery on the sleeve ornamentation shall be fabricated from two plies of synthetic yarn listed in 3.3.2, twisted together in a right hand twist having 14 to 16 twists per inch.

3.3.3 Thread.

3.3.3.1. Embroidery thread. The silk thread for the embroidery shall be best quality pure silk conforming to type I, ticket No. 00, 3-ply of A-A-50196. The color shall be scarlet, shade W, cable No. 66040.

3.3.3.2. Sewing thread. The silk thread for stitching the synthetic gold shall be type I, ticket No. A, 3-ply of A-A-50196. The color shall be gold, shade TX, cable No. 66087, or mercerized

MIL-DTL-82194C(MC)

nylon thread of equal strength and matching color may be used when ornamentation is required to be finished. The nylon thread for edge stitching shall conform to type I, class A, size AA, 2 or 3-ply of V-T-295. The color shall be black, shade AA, cable No. 66043 (see DoD Standard Color Card of Official Standardized Shades for Sewing Threads 1968).

3.3.3.3. Colorfastness. The colored threads, when tested as specified in the applicable thread specification, shall show fastness to wet (dry) cleaning and light equal to or better than the standard sample. When no standard is available, the colored thread shall show good fastness to wet cleaning and light.

3.3.4 Backing and underlay for embroidery.

3.3.4.1. Crinoline. Backing for the scarlet silk embroidery shall be cotton crinoline, black, 2.8 ounce per square yard, having a thread count of approximately 44 per inch in the warp direction, and 35 per inch in the filling direction, and a breaking strength (grab) of approximately 54 pounds in the warp direction and 25 pounds in the filling direction.

3.3.4.2. Underlay. Underlay for the scarlet silk and synthetic gold embroidery shall be of the type used in best commercial practice. Underlay for the scarlet silk embroidery thread shall have a scarlet color on the upper surface to closely match the shade of the thread. Underlay materials shall be flexible so as to not crack when bent.

3.3.5 Buttons, and button toggles. Sleeve ornamentation shall be provided with three metal, gold plated, Marine Corps insignia buttons, 27 line, regular shank, conforming to type I, style 3, class A, subclass 1 of MIL-DTL-3461. Buttons shall be secured to the ornamentation with ring fasteners conforming to MIL-DTL-3461.

3.3.6 Lining. The material for lining the ornamentation shall be cloth, twill, rayon, black, shade 2604, 3.7 ounce conforming to class 1 of MIL-C-368.

3.3.7 Interlining. The material for interlining the sleeve and collar ornamentation shall be cloth buckram, cotton, 3.5 to 5 ounce, conforming to type III of A-A-50186.

MIL-DTL-82194C(MC)

3.4. Design. The embroidery design, and the design of the finished ornamentation shall be as shown on Figures 1 through 5 and shall conform to the approved samples.

3.5. Patterns. The standard patterns for the collar, shoulder strap, and sleeve patch shall be furnished by the Government and shall not be altered in any manner and shall be used only as a guide for cutting working patterns. Patterns for collars and shoulder straps are for the sizes indicated in 1.2 and 3.7.

3.5.1 List of pattern parts. The sleeve patch shall be cut from the specified material in accordance with the pattern part indicated:

ITEM	PATTERN NOMENCLATURE	NO. OF CUT PARTS
	Material: Cloth, broadcloth, wool	
1	Collar	1
2	Shoulder straps	2
3	Sleeve patch	2
	Material: Cloth, twill, rayon (lining)	
4	Collar	1
5	Shoulder strap	2
6	Sleeve patch	2
	Material: Cloth, buckram, cotton (interlining)	
7	Collar	1
8	Sleeve patch	2
	Marker	
9	Finished sleeve patch and button marker	1
	Shaper	
10	Finished collar shaper	1

3.6. Construction.

3.6.1 Manufacturing requirements. The ornamentation shall be constructed of materials specified herein and shall include details shown on applicable figures and as specified herein. The contractor is not required to follow the exact sequence of operations as specified herein, but all operations specified shall be used to manufacture the ornamentation.

MIL-DTL-82194C(MC)

3.6.1.1. Tacking. Ends of stitching shall be securely backtacked not less than 1/4 inch.

3.6.1.2. Identification marking. The collar and sleeve patches shall be marked for type and class (see 1.2). The shoulder straps shall be marked by size. Labels shall conform to types IV or V, class 2 of DDD-L-20.

3.6.1.3. Cutting. Cut the collar, shoulder straps and sleeve ornamentation patches with patterns furnished by the Government. Cut material in the direction indicated by directional lines on the patterns.

3.6.2 Collar ornamentation. Collar ornamentation shall consist of a single line of scarlet silk embroidery outlined with one continuous length of synthetic gold border (see 3.3.2.1) along top and ends of collar as shown on Figure 4. The scarlet silk embroidery shall be made through the crinoline backing. Silk embroidery shall have sufficient underlay to produce well raised and rounded effect. The embroidered stitches shall be tightly and closely drawn so as to produce a clear, sharp, straight edge outline of the required design, with the corners sharp and distinct. The density of the stitches shall be such as to provide full coverage of the underlay material, which shall have the scarlet surface next to the stitching. The synthetic gold border shall be securely stitched on with not less than 10 stitches per inch. Stitching shall be through the crinoline backing. The stitched on gold border shall be straight and even without twisting, curling or other distortion, and shall be sewn as close as possible to both sides and ends of the silk embroidery. Ends of the border shall start and finish at one of the inside corners of the silk embroidery and shall be securely stitched down. The finished width of the silk embroidery shall be 1/8 inch, and the finished width of the embroidery including the border shall be 1/4 inch. The ends of the embroidery shall finish evenly at the ends of the collar and, after the collar is assembled to jacket, shall finish 3/16 to 1/4 inch from lower edge of collar.

3.6.3 Shoulder strap ornamentation. Shoulder strap ornamentation shall consist of a single line of scarlet silk embroidery outlined with synthetic gold border around all edges of the strap as shown on Figure 5. The scarlet silk embroidery shall be made through the crinoline backing. Silk embroidery shall have sufficient underlay to produce a well raised and

MIL-DTL-82194C(MC)

rounded effect. The embroidered stitches shall be tightly and closely drawn so as to produce a clear, sharp, straight edge outline of the required design, with the corners sharp and distinct. The density of the stitches shall be such as to provide full coverage of the underlay material, which shall have the scarlet surface next to the stitching. The border shall be securely stitched on with not less than 10 stitches per inch. Stitching shall be through the crinoline backing. The stitched on border shall be straight and even without twisting, curling or other distortion, and shall be made as close as possible to both sides of the silk embroidery. Ends of the border shall be securely stitched down. Shoulder straps to be furnished finished shall be constructed as specified in MIL-DTL-82193. The finished width of the silk embroidery shall be 1/8 inch, and the finished width of the embroidery including the border shall be 1/4 inch. Width of finished shoulder straps shall be 2-3/4 inches at the armhole end tapering to 1-3/4 inches one inch from the collar end.

3.6.4 Sleeve ornamentation. Sleeve ornamentation of each class shall consist of a single line of scarlet silk embroidery outlined with one continuous length of synthetic gold border along the top, front, and bottom edges, with gold oak leaf and acorn design along inside of embroidered edges on class 1 and 2 ornamentation and with gold clover leaf design centered on class 3 sleeve ornamentation, as shown on Figures 1, 2, and 3. The back edge of the sleeve ornamentation shall have three points (see Figures 1, 2, and 3), made in accordance with patterns furnished. Dimensions of finished sleeve ornamentation shall be 6-1/2 inches at top edge, 5-1/2 inches at front edge, and 5-3/4 inches at bottom edge, measured as shown on Figures 1, 2, and 3.

3.6.4.1. Silk embroidery and synthetic gold border. The scarlet silk embroidery shall be made through the crinoline backing. Silk embroidery shall have sufficient underlay to produce a well raised and rounded effect. The embroidery stitches shall be tightly and closely drawn so as to produce a clear, sharp, straight edge outline of the required design, with the corners sharp and distinct. The density of the stitches shall be such as to provide full coverage of the underlay material, which shall have the scarlet surface next to the stitching. The border shall be securely stitched on with not less than 10 stitches per inch. Stitching shall be through the crinoline backing. The stitched on border shall be straight and even, without twisting, curling, or other distortion, and shall be made as close as possible to

MIL-DTL-82194C(MC)

both sides and ends of the silk embroidery. Ends of the border shall start and finish at one of the inside corners of the silk embroidery and shall be securely stitched down. Sleeve patches to be furnished finished shall be constructed as specified in MIL-DTL-82193. The finished width of the silk embroidery shall be 1/8 inch, and the finished width of the embroidery including the border shall be 1/4 inch. Ends of the embroidery shall be on an angle as shown on Figures 1, 2, and 3. The front end of the sleeve ornamentation shall be slanted back from the top to bottom as shown on Figures 1, 2, and 3 to conform to shape of bottom end of sleeves of jacket.

3.6.4.2. Interior designs. The interior designs shall have sufficient underlay to produce a well raised and rounded effect, and the design for each class shall conform to Figures 1, 2 and 3. The embroidered stitches shall be tightly and closely drawn, and of sufficient number and density to produce the required design and to provide full coverage of the underlay material. Acorns shall be positioned as shown in Figures 1 and 2. The number of leaves and acorns on type III, class 1, and class 2 ornamentation shall be as follows:

	<u>Class 1</u>		<u>Class 2</u>	
	<u>Leaves</u>	<u>Acorns</u>	<u>Leaves</u>	<u>Acorns</u>
Top	11	6	11	6
Bottom	9	5	11	6

3.7. Correlation of sizes. Table I shows the correlation of sizes between collars, shoulder straps and jackets.

Table I. Correlation of sizes.

Jacket (inches)	Collar <u>1</u> / (inches)	Shoulder strap <u>2</u> / (inches)
36	16	5-1/4
38	16-1/2	5-3/8
40	17	5-1/2
42	17-1/2	5-5/8
44	18	5-3/4
46	18-1/2	5-7/8

MIL-DTL-82194C(MC)

- 1/ Collar sizes represent the finished length of the collar in inches, when measured along the center of collar from end to end, and are 1-1/2 inches more than the length of standard commercial shirt collars.
- 2/ Shoulder strap sizes represent the finished length of strap in inches, when measured from the round end to armhole seam, and are intended for use on the standard size jackets indicated in Table I. When the shoulder of the standard size jacket is modified for an individual, a shorter or longer strap, as required, shall be used to permit the strap to finish to regulation; that is, the round end of the strap shall finish 1/4 to 3/8 inch from the collar, and the embroidery at armhole end of strap shall finish 1/8 inch from the armhole seam.

3.8. Workmanship. Workmanship shall be first class in all respects. Finished ornamentation shall be free from any defects which may affect appearance or serviceability.

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 provisions set forth in ANSI/ASQC Z1.4.

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

MIL-DTL-82194C(MC)

4.4. Conformance inspection.

4.4.1 Testing of components. Testing of components shall be in accordance with the applicable subsidiary specifications and standards to the extent applicable, except that this specification shall govern in the event of conflict. The method of testing will be as specified in FED-STD-191, wherever applicable. Testing shall be performed on components listed in Table II for characteristics noted.

TABLE II. Test methods.

Components	Characteristics	Reqmt. para.	Test method	No. Det. per S/unit	Results reported as
Crinoline	Material identification	3.3.4.1	1200		Pass or fail
	Weight	3.3.4.1	5041		Pass or fail
	Thread count	3.3.4.1	Visual		Pass or fail
	Breaking strength	3.3.4.1	5100		Pass or fail
	Color	3.3.4.1	Visual		Pass or fail
Underlay	Color	3.3.4.2	Visual		Pass or fail
	Flexibility	3.3.4.2	5230		Pass or fail

4.4.1.1. Sampling for testing. Unless otherwise specified in subsidiary specifications, sampling shall be in accordance with the following. The lot shall be unacceptable if one or more sample units fail to meet any test requirement specified herein.

Lot size	Sample size
800 or less	2
801 to 22,000 inclusive	3
22,001 and over	5

The unit for expressing lot size and sample unit for testing each component shall be in accordance with the applicable subsidiary specifications and as follows:

Component	Expressed as	Sample unit for testing
Crinoline	yards	one yard full width
Underlay	yards	one yard

MIL-DTL-82194C(MC)

4.4.2 In-process inspection. Inspection shall be performed during the manufacturing of the end item to ascertain the operations are performed as specified herein. The Government reserves the right to determine the acceptability of construction methods not performed in accordance with specified requirements for operations or subassemblies.

4.4.3 Examination of the end item. Prior to the formation of a lot and as a final step in the contractors production control plan, each item shall be examined for those defects listed in 4.4.3.1 and 4.4.3.2. The sample unit shall be one item.

4.4.3.1. General defects. General defects shall be classified as follows:

Examine	Defects	Classification	
		Major	Minor
Material, base cloth	a. Any hole, cut, tear, float, broken pick, slub, stain, streak or, other visible defect.	101	
Underlay, crinoline and lining	a. Other than specified.	102	
Color or shade	a. Color or shade of any component other than as specified.	103	
Buttons and ring fasteners (when required)	a. One or both omitted, wrong type, style, class or color.		201
Design	a. Any detail not conforming to requirements or standard sample.		202
Workmanship	a. Any component missing.		203
	b. One or more embroidery stitches missing or out of alignment affecting appearance.		204
	c. Rework damage, affecting appearance.		205
	d. Stitches per inch less than specified.		206

MIL-DTL-82194C(MC)

Examine	Defects	Classification	
		Major	Minor
Embroidery	a. Not as specified.		207
	b. Core yarn not fully covered with metallic ribbon.		208
	c. Loose stitches.		209

4.4.3.2. Finished measurements. Any dimension exceeding the tolerances specified below shall be classified as a defect:

Measurement	Tolerance
Less than 1 inch	See note
1 inch and over	$\pm 1/8$ inch

NOTE: Deviation from specified tolerance affects appearance.

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 ornamentation components described herein are intended to be worn on evening dress jackets worn by male officers of the U.S. Marine Corps; MIL-DTL-82193 contains jacket requirements.

MIL-DTL-82194C(MC)

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

- a. Title, number, and date of the specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).
- c. Packaging requirements (see 5.1).
- d. Type and class required.
- e. Whether first article is required (see 3.2).

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

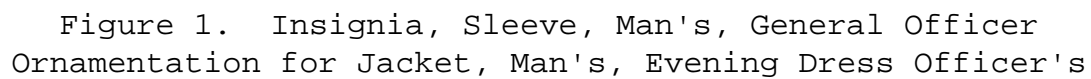
6.4. Figures. Figures 1 through 5 are furnished for information purposes only. To the extent of any inconsistencies between the written specification and the figures, the written specification shall govern.

6.5. Subject term (keyword) listing.

Collar
Gold embroidery
Male
Shoulder straps
Sleeve

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. 8455-N859



MIL-DTL-82194C(MC)

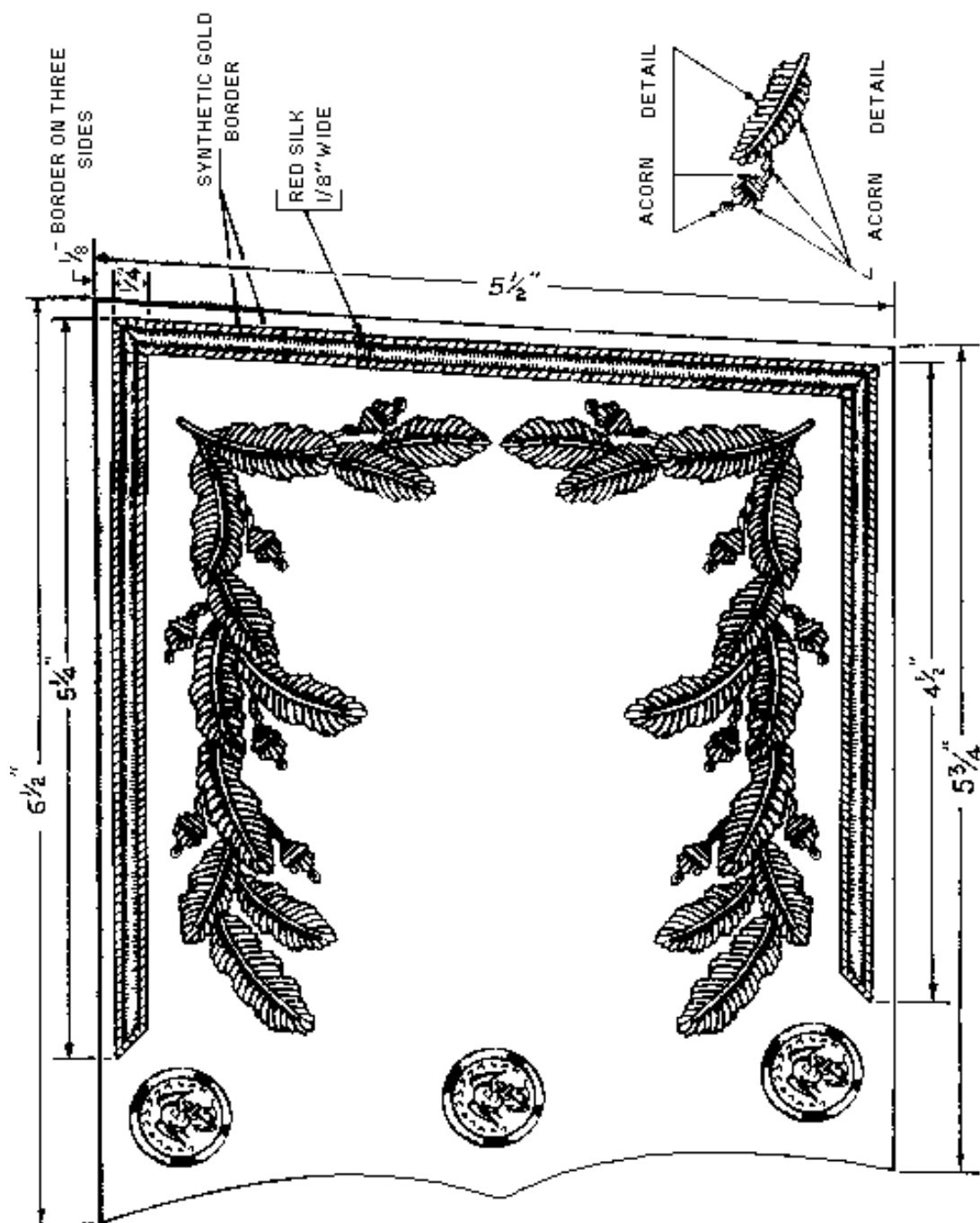


Figure 2. Insignia, Sleeve, Field Officer Ornamentation for Jacket, Man's, Evening Dress Officer's

MIL-DTL-82194C(MC)

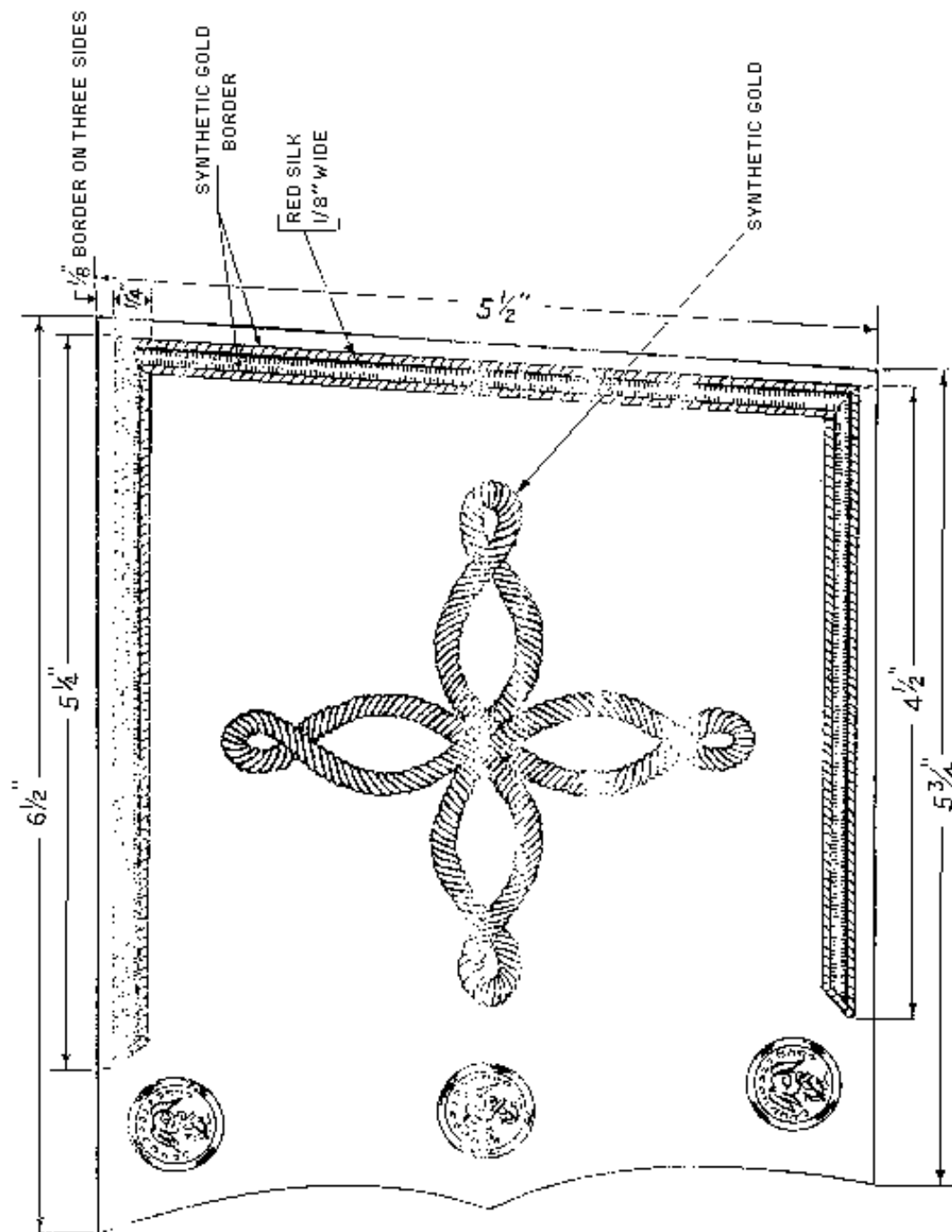


Figure 3. Insignia, Sleeve, Company Officer
Ornamentation for Jacket, Man's, Evening Dress Officer's

MIL-DTL-82194C(MC)

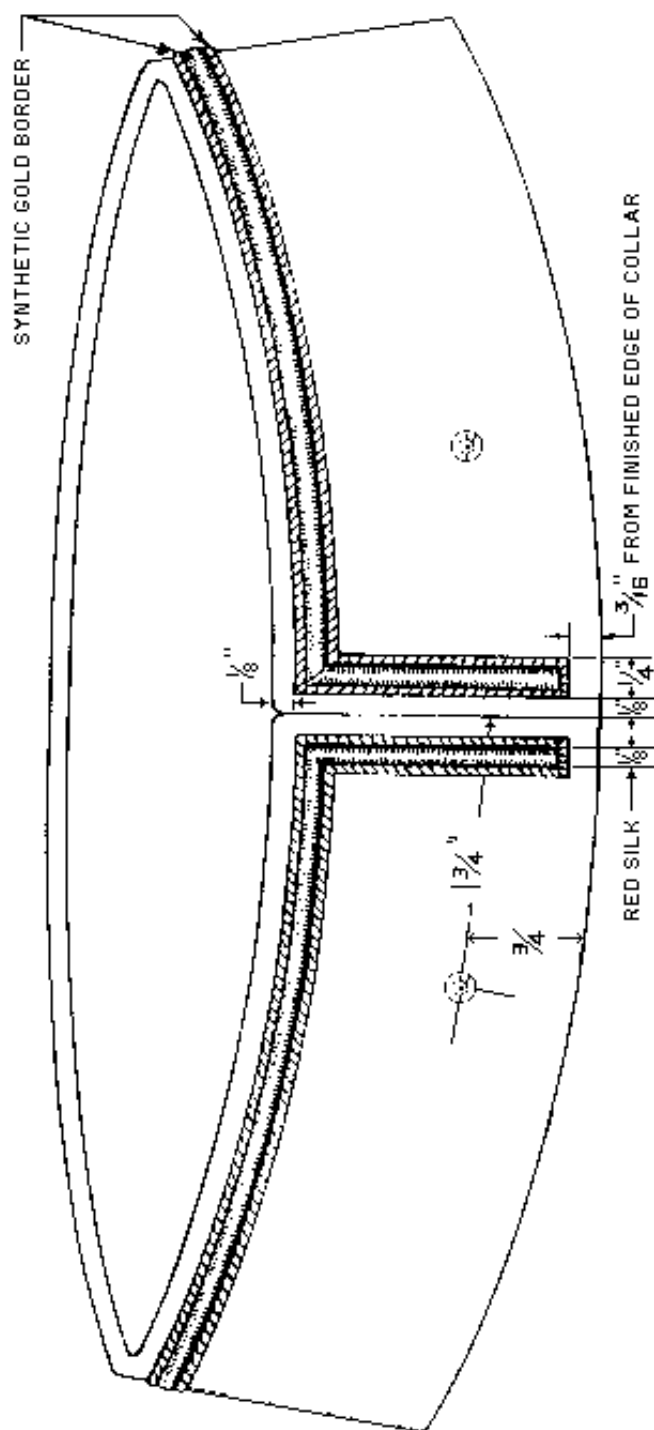


Figure 4. Collar for Jacket, Man's, Evening Dress Officer's
Ornamentation for Jacket, Man's, Evening Dress Officer's

MIL-DTL-82194C(MC)

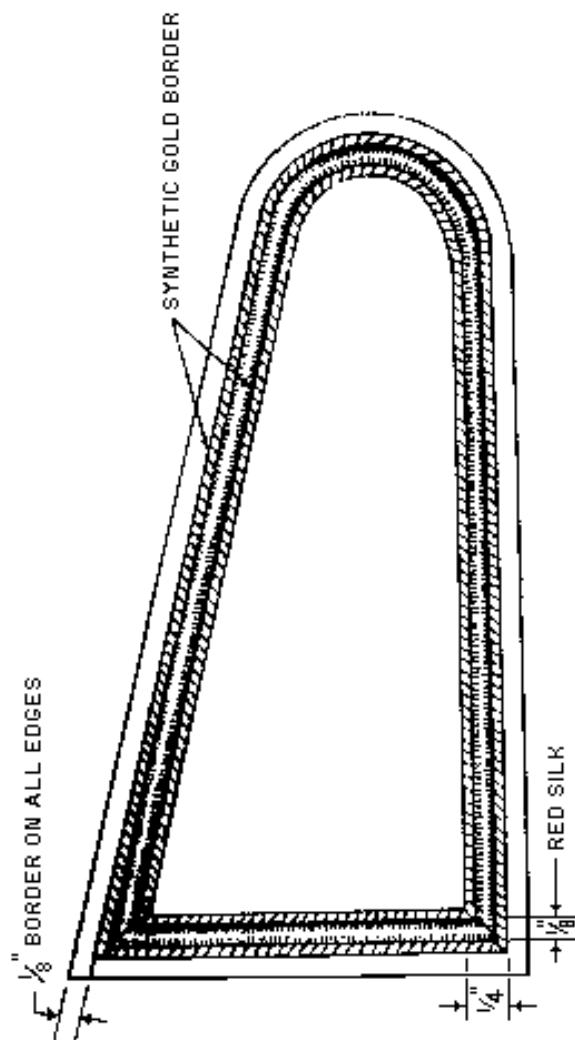


Figure 5. Shoulder Strap for Jacket, Man's, Evening Dress
 Officer's Ornamentation for Jacket, Man's,
 Evening Dress Officer's

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-82194C(MC)

2. DOCUMENT DATE (YYMMDD)
 97 08 11
3. DOCUMENT TITLE

ORNAMENTATION-FOR JACKET, MAN'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)**7. DATE SUBMITTED**
(YYMMDD)

(1) Commercial

(2) AUTOVON

(If applicable)

8. PREPARING ACTIVITY
a. NAME
 COMMANDER, MARCORSYSCOM, PSE-D

b. TELEPHONE (include Area Code)
 (1) Commercial (2) AUTOVON
 (703) 784 4584

c. ADDRESS (Include Zip Code)
 2033 BARNETT AVE, SUITE 3125
 QUANTICO, VA 22134-50210

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:
 Defense Quality and Standardization Office
 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3488
 Telephone (703) 756-2340 AutoVON 289-2340