

PURCHASE DESCRIPTION

ROBE, DRESSING, CADET

1. SCOPE

1.1 Scope. This purchase description covers the requirements for a French terry cloth made from 100 percent cotton fiber. The dressing robe intended for wear by personnel of the United States Military Academy (USMA) at West Point.

1.2 Classification. The robe will be available in one (1) type in the sizes specified in 1.2.1.

1.2.1 Sizes. The robe sizes will be as follows:

X-Small, Small, Medium, Large, X-large, XX-Large

NOTE: The above sizes may be abbreviated as XS, S, M, L, XL and XXL

1.2.1.1 Sizes for belts shall be as follows:

Style A	“Belt-Small”	XS, S,
Style B	“Belt”	M, L, XL and XXL

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 or 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 cited in sections 3 or 4 of this specification, whether or not they are listed.

2.2 Government documents.

Comments, suggestions, or questions on this document should be addressed to: Department of the U.S. Army, DEVCOM - Soldier Center, ATTN: FCDD-SCD-PEI, 10 General Greene Avenue, Natick, MA 01760-5019, and the Cadet Uniform Factory, 687 Rogers Place, West Point, NY, 10996, ATTN: ASCE-LWP-CU.

AMSC N/A

FSC 8405

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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 solicitation or contract (see 6.2).

COMMERCIAL ITEM DESCRIPTIONS

A-A-50199 - Thread, Polyester Core, Cotton or polyester covered

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-B-13466 - Braid, Textile and Lace, Vellum, Woven, Textile
MIL-DTL-32075 - Label: For Clothing, Equipage and Tentage (General Use)

(Copies of these documents are available online at <http://quicksearch.dla.mil>)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract (see 6.2).

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC EP1 - Evaluation Procedure for Gray Scale for Color Change
AATCC EP2 - Evaluation Procedure for Gray Scale for Staining
AATCC EP9 - Evaluation Procedure for AATCC 9-Step Chromatic Transference Scale Rating
AATCC TM8 - Colorfastness to Crocking: AATCC Crockmeter Method
AATCC TM15 - Colorfastness to Perspiration
AATCC TM61 - Colorfastness to Laundering, Accelerated
AATCC TM107 - Colorfastness to Water
AATCC TM135 - Dimensional Changes of Fabrics after Home Launderings

(Copies of these documents are available online at <https://aatcc.org>)

AMERICAN SOCIETY FOR QUALITY (ASQ)

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

(Copies of this document are available online at <http://asq.org>).

ASTM INTERNATIONAL

ASTM D3776/D3776M	- Standard Test methods for mass per Unit Area (Weight) of Fabric
ASTM D3787	- Standard Test methods for Bursting Strength of Textiles – Constant Rate-of Traverse (CRT) Ball Burst Test
ASTM D3990	- Standard Terminology Relating to Fabric Defects
ASTM D6193	- Standard Practice for Stitches and Seams

(Copies of these documents are available online at <https://www.astm.org>)

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

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

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

3.3 Component and end item inspection. When specified (see 6.2), a sample shall be subjected to component and end item inspection in accordance with 4.4.1

3.4 Standard sample. Unless otherwise indicated, the finished dress coat shall match the standard sample for shade and appearance and shall be equal to or better than the standard sample with respect to all characteristics for which the standard sample is referenced (see 6.4) when tested as specified in 4.5.1.

3.5 Recycled, recovered, environmentally preferable, or biobased materials. Recycled, recovered, environmentally preferable, or biobased 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.

3.6 Design. The robe shall be a medium-length, wrap-around style with a shawl collar, three (3) patch pockets; one (1) on the left (as worn) chest and one (1) on each side of the lower front, long sleeves, a hanger loop and a separate belt with pointed ends. The pockets, collar and fronts are trimmed with edge cord. The collar and fronts shall be faced. The West Point embroidered emblem shall be sewn to the chest pocket.

3.7 Materials.

3.7.1 Basic material. The basic material for the robe shall be 100 percent cotton. The color of the basic material shall be black and shall match the standard sample when tested as specified in Table I. Pre-cut pieces of the basic material shall be provided by the Government. The basic

material shall meet the physical requirements in Table I when tested as specified in Table

3.5 Color. The basic material color shall be black.

3.5.1 Labile sulfur. Dyes and compounds containing elementary sulfur capable of oxidation to sulfuric acid shall not be used. The dyed cotton shall be “Free” of labile sulfur when tested as specified in 4.6.1.

3.6 Physical requirements. The fabric shall be a single-sided napped French terry made from 100 percent cotton fiber and shall meet the requirements stated in Table I when tested as specified in 4.4.

TABLE I. Physical requirements for basic material.

Characteristic	Requirement
Weight, (ounces/linear yard)	12 ($\pm$ 1.0)
Fabric yarn count	
Wales	26 to 27
Courses	36 to 37
Bursting strength (pounds) (minimum)	40
Dimensional stability (percent) (maximum)	
Wales	5
Courses	5
Colorfastness to (minimum)	
Laundering (3 cycles)	
Color change	4-5
Staining	
Cotton	4
Polyester	3
Crocking	
Dry	4
Wet	3
Perspiration	
Color change	4
Staining	
Cotton	4
Polyester	3
Water	
Color change	4-5
Staining	
Cotton	4
Polyester	3
Finish	<u>1/</u>

1/ The finished cloth shall exhibit no dermatological or toxic effects to the users. The supplier is responsible for certification that the finished product is composed of materials which have been safely used commercially or provide sufficient toxicity data to show compatibility with

prolonged direct skin contact (see 3.13).

3.5.4 Embroidered emblem. The finished embroidered emblem on chest pocket shall match the embroidery file for size, stitch count, and finished appearance. The colors for the embroidered emblem shall be Black PF900, Blue PF367, White PF800, Gold PF 523, Red PF701 and Gray PF486. The embroidered emblem shall be provided by the Government.

3.6 Components.

3.6.1 Thread. The thread for all seaming and stitching shall polyester core, cotton or polyester-covered Tex 31-35 conforming to A-A-50199. The color shall be a good match to the basic material and show good colorfastness to laundering. The thread shall have no chemical finishes or treatments other than those commonly used on commercial threads.

3.6.2 Braid.

3.6.2.1 Sleeve and pocket ornamentation. The sleeves and pockets ornamentation braid shall be 1/8-inch wide soutache braid, ELC Industries gold 346 (Nylon) conforming to Type I, Class 1 of MIL-B-13466. Sufficient lengths of the soutache braid shall be provided by the Government.

3.6.2.2 Cord edge braid. The collar and fronts shall be edged with ELC Industries gold 346 (Nylon) cord edge braid, 3/32-inch wide conforming to Type I, Class 2 of MIL-B-13466. Sufficient lengths of the cord edge braid shall be provided by the Government.

3.6.3 Embroidered emblem. The embroidered emblem (see 3.4.2) shall be sewn to the chest pocket prior to attaching the pocket to the robe and in accordance with the placement instructions in Figure 1. The finished dimensions of the pocket shall be 5-1/4 ($\pm$ 1/8) x 5 ($\pm$ 1/8).

3.7 Barcoded labels. The Government shall provide barcoded labels. The label shall include the size, the local Stock number; 840501Y503802, and a bar-coded element indicating the local stock number. The label shall be sewn into the left facing (as worn) with the top edge of the label 18-1/2 ($\pm$ 1/2) inches from the hem. The labels shall show no signs of fading or delamination when tested as specified in 4.4.3.

3.8 Construction.

3.8.1 Hanger loop. The hanger shall be made from basic material and shall finish 1/2 ($\pm$ 1/16) inch wide by 5 (1/8) inches long. The hanger loop shall be folded in half and sewn into the collar joining seam at the center back. The ends of the hanger loop shall not be stacked but will lay side by side.

3.8.2 Pockets. The pockets shall have the soutache braid attached prior to attaching to the robe. The braid shall be attached in accordance with pattern notches and instructions in Figure 2.

The pockets shall have a single fold hem at the top and shall have square corners. The chest pocket hem shall be 1-1/4 ($\pm 1/8$) and the finished dimensions shall be 5 ($\pm 1/8$) wide by 5-1/2 ($\pm 1/8$) long. The lower pocket hem shall be 1-1/2 ($\pm 1/8$) and the finished dimensions shall be 6-1/4 ($\pm 1/8$) wide by 6-1/2 ($\pm 1/8$) long. Topstitching of the pockets shall be 1/8 ($\pm 1/16$) inch from edge and shall be backstitched 1/4 to 3/8-inch at the upper corners.

3.8.3 Collar and front facing. The fusible interlining (see 3.5.2) shall be applied to the collar and front facing piece. The cord-edge braid shall be applied to the full length of the collar and front facing. Topstitching of the facing shall be 1/8 ($\pm 1/6$) from edge.

3.8.4 Belt. The belt shall have two sizes be made of basic fabric, cut from one (1) piece of fabric and folded lengthwise forming pointed ends. It shall measure 2 ($\pm 1/4$) inches wide by 68 ($\pm 1/4$) inches long for sizes XS and S, and 74 ($\pm 1/4$) inches long for sizes M, L, XL and XXL. Only the seamed edge of the belt shall be topstitched 1/4 ($\pm 1/16$) inch from the edge. Belt length measurement is taken from point to point.

3.8.5 Belt loops. There shall be two (2) belt loops; one (1) on each side as indicated on the pattern. The belt loops shall be made from basic material and shall finish 1/2 ($\pm 1/16$) inch wide. The cut length for each belt loop shall be 4-3/4 ($\pm 1/8$) inches. Turn under 1/2-inch on each end and attach to robe. The ends of each belt loop shall be topstitched 1/8 to 3/16-inch from the fold.

3.8.6 Hems.

3.8.6.1 Sleeve hem. The sleeve hems shall be single fold and shall be 1-5/8 ($\pm 1/8$) wide. The sleeves shall be hemmed and the soutache braid attached prior to sewing the underarm seam. The underarm seam shall be turned to one (1) side and bar tacked or backstitched to secure the seam to the sleeve hem.

3.8.6.2 Bottom hem. The bottom hem shall be single fold and shall be 1-1/4 ($\pm 1/8$) inches wide. The stitching shall be 1 to 1-1/8 inches from the folded edge. The hem shall be turned up and finish behind the front facing.

3.9 Figures. Figures 1 and 2 are not true to size but designated measurements are actual and are furnished for informational purposes only. If there are inconsistencies between the figures and the specification the specification will govern.

3.10 Patterns. The Government can supply a complete set of patterns which provide for an allowance of 3/8-inch for all seams upon request. The Government patterns may be used to create the contractor's working patterns. Minor modifications are permitted to accommodate automatic equipment, however the design and all measurements shall be maintained as specified by the Government.

3.10.1 List of pattern parts. The component parts of the robe shall be cut from materials specified in accordance with the number of parts indicated in Table II.

TABLE II. List of pattern parts.

Material	Nomenclature	Cutting Direction	Cut parts
Basic material C0320	Front <u>1/</u>	All pattern pieces are cut following the selvage. All grainlines follow the warp direction.	2
	Back <u>1/</u>		1
	Sleeve		2
	Chest pocket		1
	Lower pocket		2
	Facing		4
	Belt		1
	Belt - small		1

1/ Front and back may be combined and cut as one (1) piece for sizes XS, S, M, and L.

3.11 Stitches and Seams. All stitches, seams and stitching shall conform to ASTM D6193. All seams shall start and finish evenly. All seams that junction shall meet within 1/4-inch. Repairs such as mends, darns, patches or splices are not permitted. All 301 stitching shall have a minimum 10-12 stitches per inch. For overedge stitching (stitch type 502 and 514), the stitches per inch shall be a minimum 8-12. Unless otherwise specified all topstitching shall be 1/8-inch from folded edge. The shoulder, sleeve, and armhole seams shall be clean finished with an overedge stitch. Seams required to be forced out and having a depth between the fold of 1/8-inch or greater, shall be considered a defect. All stitched seams shall allow for maximum stretch without cracking or any restrictions.

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3.12 Finished measurements. The robe shall conform to the finished measurements in Table III when measured as specified in Table IV.

TABLE III. Finished measurements (inches).

Size	Sleeve length (A)	Back length (B)	Shoulder length (C)	Sweep length (D)	Sleeve opening (E)	Armhole opening (F)
X-Small	23.00	42.00	16.00	52.00	6.5	11.0
Small	24.00	44.00	17.00	53.00	6.5	11.0
Medium	25.00	46.00	18.00	54.00	6.5	11.0
Large	26.00	50.00	19.00	55.00	7.0	11.50
X-large	28.00	55.00	21.00	62.00	7.0	11.50
XX-large	x	x	x	x	x	x
Tolerance	± 1/4	± 1/2	± 1/4	± 1/2	± 1/8	± 1/8

TABLE IV. Method of measuring.

(A) Sleeve length	Measure along underarm seam from armhole seam to bottom of sleeve
(B) Back length	Measure center back from collar joining seam to bottom of robe
(C) Shoulder length	Measure along shoulder seam from collar joining seam to armhole seam
(D) Sweep length	Measure at the bottom of the garment from end to end.
(E) Sleeve opening	Measure along bottom of sleeve from folded edge to folded edge
(F) Armhole opening	Measure in a straight line from shoulder seam to underarm seam.

NOTE: Measurements shall be taken with robe lying flat but not stretched.

3.13 Toxicity. Unless otherwise specified in the contract or procurement documents, the finished cloths shall not present a health hazard and shall show compatibility with prolonged, direct skin contact when tested as specified in 4.5.3.

3.14 Workmanship. The finished robes shall conform to the quality of product established by this specification. The robe shall be free from all defects as specified in Table V which would affect its serviceability, appearance and uniformity.

4. VERIFICATION

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

- a. First article inspection (see 4.2).
- b. Conformance inspection (see 4.3).
- c. Component and end item inspections (see 4.4).

4.1.1 Inspection conditions. Unless otherwise specified, excluded, amended, modified, or qualified in this PD or applicable procurement documents (see 6.2), all inspections shall be performed in accordance with all the requirements of referenced documents.

4.2 First article inspection. The first article, submitted in accordance with 3.1.1, shall be inspected for design, examined for color and appearance in 3.2, finished dimensions in 3.9, finished defects in 4.5.1, and tested as specified in 4.5.3. The presence of excessive defects, as defined by contract (see 6.2) or failure to pass any test shall be cause for rejection of the first article. The sample size shall be specified in the procurement document (see 6.2). The sample unit shall be one (1) robe and the lot size shall be expressed in units of robes.

4.3 Conformance inspection. Conformance inspection shall include the examination of defects as specified in 4.5.1, finished measurements in 3.9, and the tests in 4.5.3. Sampling for inspection shall be performed in accordance with ASQ/ANSI Z1.4 and Acceptance Quality Limits (AQL) as defined in the contract and/order, except where otherwise indicated (see 6.2).

4.4 Component and end item inspection. In accordance with 4.1, components and end items shall be tested in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this document or applicable procurement documents. The Government reserves the right to inspect and test all components and end items to determine conformance to requirements.

4.5 End item visual examination. Each robe shall be examined for the defects listed in Table IV. The lot shall be expressed in units of robes. All fabric and garment defects shall be scored in accordance with Table V which are clearly noticeable at normal viewing and affect serviceability and appearance of the finished robe. Material defects are defined in ASTM 3990. If needed, closer inspection will be performed to verify compliance to specification requirements. Shade shall be evaluated at a distance of 3-feet.

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TABLE V. End item visual defects.

Examination	Defect	Classification	
		Major	Minor
Material	Any hole, cut, tear, mend, run, drop stitch, loose knit, thin space, missing knit, knitted waste	101	
	Any spot or stain	102	
	Permanent folds, pleats or creases	103	
	Color not as specified or streaked	104	
	Knots greater than Fabric Defect Replica Scale Level C (see 2.3)	105	
	Slubs greater than fabric Defect Replica Scale Level D (see 2.3)	106	
Stitches and Seams	Any seams open, puckered, distorted, pleated, twisted or irregular	107	
	Irregular stitching, loose or tight tension resulting in loose or tight seams	108	
	Skipped or runoff stitches, ends of stitching not secured	109	
	Thread breaks not mended	110	
	Visible mend, pleat or crease	111	
Construction	Any component part missing, omitted, damaged, full, tight, twisted or distorted	112	
	Any part caught in an unrelated operation or stitching	113	
	Any raw edges	114	
Shade	Shaded parts, any part noticeably shaded from the other parts or variation in shade within a part	115	
	Discoloration		201
	Component color not as specified	116	
Component parts	Not as specified	117	
	Any component misplaced, omitted or not attached correctly	118	
	Any component part shade not matching base fabric		202
Cleanliness	Any spot or stain clearly noticeable	119	
	Thread ends not trimmed or removed		203
	Odor affecting serviceability	120	
Workmanship	Distorted parts or poor workmanship	121	
	Any fullness, pleats, gathers or twists	122	
Labels	Omitted, incorrect, illegible, not attached/applied where specified	123	
Packaging	Not packaged in accordance with the contract or purchase order	124	

4.6 End item dimensional examination. The robes shall be examined for conformance to the dimensions specified in Table II. Any dimension not within the specified tolerance shall be classified as a defect. The lot size shall be expressed in units of robes. The inspection and the Acceptance Quality Limits (AQL), expressed in terms of defects per hundred units, shall be as specified in the contract or purchase order.

4.7 Component and end item testing. The finished robes shall be tested for the characteristics listed in Table V. The methods of testing specified in Table V shall be followed. All test reports shall contain the individual values utilized in expressing the final results. The sample unit shall be one (1) robe for all physical and chemical tests. The sample size shall be five (5) robes. The lot shall be unacceptable if one (1) or more sample units fail to meet any requirement specified.

4.7.1 Basic cloth. The basic cloth physical requirements as specified in Table I shall be verified by the test methods specified below in Table VI.

TABLE VI. Component testing for basic.

Characteristic	Requirement paragraph	Test Method
Weight	3.5.1 and Table I	ASTM D3776/D3776M Opt. C
Fabric yarn count	3.5.1 and Table I	ASTM D3775
Bursting strength	3.5.1 and Table I	ASTM D3787
Dimensional stability	3.5.1 and Table I	AATCC TM135 Table I, method 3, III, A, iii
Colorfastness: Laundering Crocking (Dry/wet) Perspiration (acid) Water	3.5.1 and Table I	AATCC TM61 Opt. 1A <u>1</u> /, <u>2</u> / AATCC TM8 <u>3</u> / AATCC TM15 <u>2</u> / AATCC TM107 <u>2</u> /
Shade	3.5.1 and Table I	4.7.2
Toxicity	3.13	4.7.3

1/ Laundering and drying conditions using Table I, method 3, III, A, iii.

2/ Rated using the AATCC EP1 and AATCC EP2.

3/ Rated using the AATCC EP8.

4.6.1 Visual shade matching. The color and appearance of the bathrobe shall match the standard sample when viewed using the AATCC EP 9, Option C, (see 6.5) with a primary light source simulating the spectral quality of average daylight, CIE Illuminant D65, with a color temperature of 6500 (± 200) Kelvin (K) illumination of 100 (± 20) foot candles. Alternatively, the color and appearance of the bathrobe shall match the standard sample with a primary light source simulating artificial daylight, CIE Illuminant D75, with a color temperature of 7500K (± 200) illumination of 100 (± 20) foot candles in lieu of D65. (See 6.5.1). The bathrobe shall also be a good match to the standard sample with a secondary source simulating the spectral quality of incandescent lamplight, CIE Illuminant A, with a color temperature of 2856K (± 200).

4.7.3 Toxicity test. When the toxicity requirement (see 3.13) can be demonstrated with historical use data on the finishing treatments used, toxicity testing may not be required. (See 6.7 and 6.9).

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2).

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 bathrobe is a United States Military Academy (USMA) item. The robes are intended for wear by male and female personnel of the USMA.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number and date of this document.
- b. Sizes required (see 1.2).
- c. The specific issue of individual documents referenced (see 2.2).
- d. When first article sample is required (see 3.1, 4.2 and 6.3).
- e. Conformance inspection acceptance quality limits (AQL) (see 4.3).
- f. When toxicity testing is required (see 4.7.1).
- g. Packaging (see 5.1).

6.3 First article. When a first article is required (see 3.1), it will be inspected and approved under the appropriate provisions of FAR 52.209-4. The first article should be a pre-production sample. The contracting officer should specify the appropriate type of first article and the number of units to be furnished. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for selection, inspection and approval of the first article.

6.4 Standard sample. USMA Standard Color and Shade samples are available upon request to USMA Directorate of Contracting, Contracting Officer for the respective contract or solicitation.

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FIGURE 1. Embroidered emblem artwork.

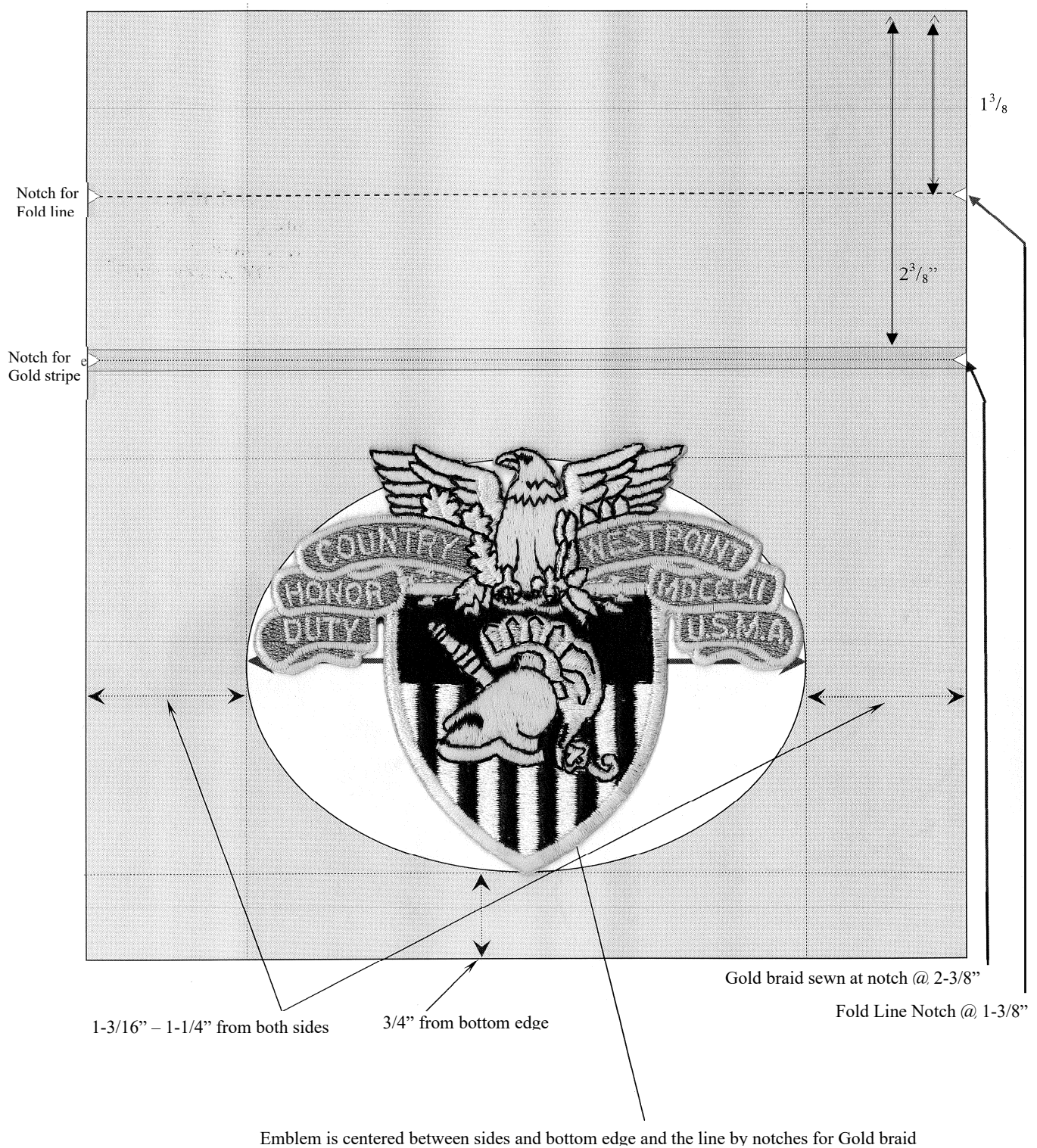


FIGURE 2. Embroidered emblem positioning on chest pocket.

USMA-17-03 REPLACE with new WP-PD-24-001

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