

MIL-B-43172E

21 September 1987

SUPERSEDING

MIL-B-43172D

10 June 1982

MILITARY SPECIFICATION

BERET, MAN'S, WOOL

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This document covers wool knit berets.

1.2 Classification. The berets shall be one type in the following classes and sizes (see 6.2):

Class 1 - Rifle Green (Army)	Class 5 - Medium Blue (Air Force)
Class 2 - Blue (Air Force)	Class 6 - Black (Army and Air Force)
Class 3 - Maroon (Air Force)	Class 7 - Maroon (Army)
Class 4 - Scarlet (Air Force)	Class 8 - Gray (Air Force)
	Class 9 - White (Air Force)

Schedule of size

6-3/8	6-7/8	7-3/8
6-1/2	7	7-1/2
6-5/8	7-1/8	7-5/8
6-3/4	7-1/4	7-3/4
		7-7/8

2. APPLICABLE DOCUMENTS

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5014 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.

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2.1 Government documents.

- * 2.1.1 Documents. The following documents 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.

SPECIFICATIONS

FEDERAL

C-F-206	-	Felt Sheet: Cloth, Felt, Wool, Pressed
V-T-276	-	Thread, Cotton
CCC-C-467	-	Cloth, Burlap, Jute (or Kenaf)
DDD-L-20	-	Label: For Clothing, Equipage and Tentage (General Use)
PPP-B-636	-	Boxes, Shipping, Fiberboard
PPP-B-676	-	Boxes, Setup
PPP-T-45	-	Tape, Gummed, Paper, Reinforced and Plain, for Sealing and Securing

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MIL-S-3577	-	Sweatband, Headware, Leather
MIL-L-35078	-	Loads, Unit: Preparation of Semiperishable Subsistence Items; Clothing, Personal Equipment and Equipage, General Specification For
MIL-T-43548	-	Thread, Polyester Core: Cotton, Rayon, or Polyester- Covered
MIL-C-43665	-	Cloth, Wool: Mothproofing Treatment of
MIL-C-43718	-	Cloth, Polyester, Polyester and Cotton: Polyester and Rayon, For Pockets

STANDARDS

FEDERAL

FED-STD-191	-	Textile Test Methods
FED-STD-751	-	Stitches, Seams, and Stitchings

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MIL-STD-105	-	Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129	-	Marking for Shipment and Storage
MIL-STD-147	-	Palletized Unit Loads
MIL-STD-731	-	Quality of Wood Members for Containers and Pallets

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(Copies of documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

- * 2.2 Other publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted shall be those listed in the issue of the DODISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS shall be the issues of the nongovernment documents which are current on the date of the solicitation.

COLOR ASSOCIATION OF THE UNITED STATES

Department of Defense Standard Shades

(Application for copies should be addressed to the Color Association of the United States Inc., 343 Lexington Ave, New York, NY. 10016-0927)

AMERICAN SOCIETY FOR TESTING AND MATERIAL (ASTM)

- D 3951 - Standard Practice for Commercial Packaging
- D 3991 - Fineness of Wool or Mohair and Assignment of Grade

(Application for copies should be addressed to the American Society for Testing and Materials, 1016 Race Street, Philadelphia, PA 19103-1187.)

(Technical society and technical association documents are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

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 shall take precedence. Nothing in this document, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Guide samples. Samples, when furnished, are solely for guidance and information to the contractor (see 6.3). Variation from this document may appear in the sample in which case this document shall govern.

3.2 First article. When specified in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.3, 6.2, and 6.5).

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3.3 Materials.

3.3.1 Shell The shell shall be knit from singles yarn of 64's grade (average fiber diameter, 20.60 to 22.04 microns with a 5.19 maximum standard deviation), or finer, blended wool (see 6.4), on a flat or circular reciprocating beret machine with 9 or 10 needles per inch. The shell shall contain not less than 95 percent wool based on the dry weight of the specimen when tested as specified in 4.4.2. After fulling and dyeing, the shell shall be blocked to size, shaped, and sheared to a smooth finish.

3.3.1.1 Color and colorfastness. The color shall be Rifle Green 297 for class 1 berets, Blue 1561 for class 2, Maroon 1560 for class 3, Scarlet 1591 for class 4, Medium Blue 1592 for class 5, Black 1593 for class 6, Maroon 453 for class 7, Gray 1609 for class 8, and White 1610 for class 9. The dyed shell shall match the standard sample and shall show fastness to light, perspiration, wet drycleaning, and crocking equal to or better than the standard sample when tested as specified in 4.4.2. When no standard sample is available the dyed shell shall show "fair" fastness to light, perspiration, and wet drycleaning, and shall show a Munsell value for crocking not lower than 8.0 when tested as specified in 4.4.2.

3.3.1.2 Mothproofing. The shell shall be mothproofed in accordance with MIL-C-43665, except that the requirements for special markings shall not apply.

3.3.1.3 Physical requirements. The finished treated shell shall conform to the following requirements when tested as specified in 4.4.2.

Weight, minimum - 16.5 ounces per square yard

Bursting strength, minimum - 45 pounds

3.3.2 Lining. The material for the lining and crown interlining shall be polyester and cotton or polyester and rayon conforming to class 1 of MIL-C-43718. The cloth shall be dyed black.

3.3.3 Cushion. The cushion strip shall be pressed wool felt conforming to type III (roll felt), classification 10A2 of C-F-206.

3.3.4 Badge stay. The badge stay shall be burlap conforming to class 4 of CCC-C-467. As an alternate, the badge stay shall be medium density, water resistant fiberboard produced from a highly purified alpha-cellulose vegetable fiber, impregnated with a minimum 32 percent of compounded neoprene. The thickness of the fiberboard shall be 0.060 ± 0.003 inch. The color of the finished badge stay shall be natural (tan). The badge stay shall not curl, nor show any sign of separation. The badge stay shall not shrink more than 1.0 percent in any direction (see 4.4.2).

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- * 3.3.5 Binding. The leather for the binding shall be full grain, vegetable tanned sheepskin conforming to MIL-S-3577 except that the leather shall be drum dyed Black 111 and the thickness shall be 2.0 to 2.5 ounces.

3.3.6 Drawcord. The drawcord shall be a 5/16 inch wide braid having 64 ends of 300 denier continuous filament rayon yarn, when tested as specified in 4.4.1. The color shall be black and shall show "good" fastness to wet drycleaning when tested as specified in 4.4.2.

- * 3.3.7 Label. Each beret shall have a combination size, identification, and instruction label conforming to type VI, class 14 of DDD-L-20, except the size for all characters shall be 1/8 inch. The fastness to drycleaning requirements of DDD-L-20 shall apply.

3.3.7.1 Instruction legend. The instruction legend shall contain the following information:

CARE LABELING INSTRUCTIONS
DRY CLEAN ONLY

3.3.8 Thread. The thread for all seaming and stitching shall be cotton-covered polyester thread conforming to MIL-T-43548, ticket No. 50, 1 or 3 ply and 70, 2 ply or as an alternate, cotton thread conforming to type 1A3, thickets Nos. 30 or 36 of V-T-276. The thread shall be dyed Black AA, C.A. 66043.

3.3.8.1 Colorfastness. The dyed thread shall show fastness to light, perspiration, and wet drycleaning equal to or better than the standard sample. When no standard sample is available, the dyed thread shall show "good" fastness to light, perspiration, and wet drycleaning.

3.4 Design. The beret consists of a knitted wool outershell, lined with polyester and bound with leather. A rayon braid, threaded through the binding, is tied in a bow at the back. The beret is equipped with a badge stay on the left front. Except for color, all classes of berets are the same.

3.5 Patterns. Standard patterns for the lining parts which provide a 1/4 inch allowance for all seams except as otherwise indicated will be furnished by the Government. The standard patterns are provided as a guide for cutting the contractor's working patterns and shall not be altered in any way. The working patterns shall be identical to the Government patterns.

3.5.1 List of pattern parts. The component parts of the lining shall be cut from materials as specified and according to the number of parts as indicated in table I.

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TABLE I. List of pattern parts

Material	Pattern nomenclature	Cut parts
Polyester cloth (see 3.3.2)	Lining	
	- crown	1
	- body	2
	- crown interlining	1
Burlap	Badge stay <u>1/</u>	1

1/ The badge stay shall consist of two plies of burlap laminated together with a water insoluble laminating compound or a single ply of alpha-cellulose fiberboard.

3.6 Construction. The construction shall conform in all respects to the requirements specified in table II and herein. Figure I is furnished solely for guidance and information. Should variation from the written document appear in figure 1, the written document shall govern.

3.6.1 Stitches, seams, and stitching. All stitches, seams and stitching shall conform to FED-STD-751. The type of seam, stitching and stitches per inch shall be as specified in table II. Seam allowances shall be maintained with seams sewn so that no raw edges, run-offs, pleats, puckers, or open seams occur. When two or more methods of seams or stitches are given for the same operation, any one may be used.

3.6.1.1 Type 301 stitching. Ends of all stitchings shall be backstitched or overstitched not less than 1/2 inch except where ends are turned under or caught in other seams or stitching. Ends of a continuous line of stitching shall overlap not less than 1/4 inch. Thread tensions shall be maintained so that there will be no loose bobbin or top thread or excessively tight stitching resulting in puckering of the materials sewn. The lock shall be imbedded in the materials sewed.

3.6.1.1.1 Repairs of type 301 stitching. Repairs of type 301 stitching shall be as follows:

- a. When thread breaks or bobbin run-outs occur during stitching, the stitching shall be repaired by restarting the stitching a minimum of 1/2 inch back of the end of the stitching. 1/

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- b. Thread break or two or more consecutive skipped or run-off stitches noted during inspection of the item (in-process or end item) shall be repaired by overstitching. The stitching shall start a minimum of 1/2 inch in back of the defective area, continue over the defective area and continue a minimum of 1/2 inch beyond the defective area onto the existing stitching. Loose or excessively tight stitching shall be repaired by removing the defective stitching without damaging the materials and restitching in the required manner. 1/

1/ When making the above repair, the ends of the stitching are not required to be backstitched.

3.6.1.2 Types 401, 502, and 503 stitching. Thread tension shall be maintained so that there will be no loose stitching. All repairs shall be in accordance with 3.6.1.1.1 a and 3.6.1.1.1.b. Repairs to stitch type 401 may be accomplished by the use of stitch type 301.

3.6.1.3 Thread ends. All thread ends shall be trimmed to 1/4 inch maximum length.

3.6.1.4 Repairs. Repairs such as mends or darns greater than 1/4 inch in length or diameter are prohibited.

3.7 Manufacturing operations requirements. The beret shall be manufactured in accordance with operation requirements specified in table II. The contractor is not required to follow the exact sequence of operations listed. Any additional tacking or holding stitching used to facilitate manufacture is permissible provided the thread is removed or does not show on the finished beret.

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NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	T H R E A D		
					NEEDLE	BOBBIN/ LOOPER	COVER
1.	<p><u>Cutting:</u></p> <p>a. Cut the polyester and cotton or rayon cloth for crown interlining and shell lining in strict accordance with patterns furnished which show head size and directional lines.</p> <p>b. Cut the felt for cushions $3/4 + 1/8$ inch in width and the length according to head size.</p> <p>c. Cut the burlap or alpha-cellulose fiberboard for badge stay in accordance with patterns furnished.</p> <p>d. Cut the braid in lengths to fit head size plus $10 + 1/4$ inches to allow for tying.</p> <p><u>Replacement of damaged parts.</u></p> <p>Care shall be exercised during the spreading, cutting and manufacturing operations to assure that material defects and damages as specified in 4.4.3 are excluded, and replaced with non-defective and properly matched material.</p> <p><u>Shade marking.</u></p> <p>Mark, ticket, or bundle all parts to insure a uniform shade, size, and proper assembly of lining.</p> <p>Any method of shade marking may be used except:</p> <ol style="list-style-type: none"> 1. Corrosive metal fastener devices 2. Sew on tickets 3. Adhesive type tickets which leave traces of paper or adhesive. 						
2.							
3.							

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	T H R E A D		
					NEEDLE	BOBBIN/ LOOPER	COVER
4.	<p><u>Make lining and apply label.</u></p> <p>a. Position label to center of crown piece, 1 inch off center tolerance with the bottom of the label toward the center front and stitched on all four sides. The stitching shall not be through the printing.</p> <p>NOTE: Labels shall not contain any holes, feed notches, or serrated edges prior to stitching to beret.</p> <p>b. Superimpose the body pieces, face to face, and seam both ends.</p> <p>c. Place interlining on under side of crown piece with longer dimensions of the rectangle placed from front to back. The short dimension shall lay across crown without slack at front and back.</p> <p>d. Join body to crown matching the seams to the center front and the center back of crown, catching the four corners of the interlining in the stitching.</p> <p>e. Position the badge stay (see footnote to table I) squarely on the inside of left front with one end $1 + 1/4$ inches to the right of the center front and the bottom edge (at center of stay) $3/4$ to $7/8$ inch from the bottom of lining. Stitch all around $1/8$ to $1/4$ inch from edge.</p>	301	LSbj-1	8-12	50	50	
		301 or 401	SSa-1 SSa-1	8-12 8-12	50 50	50 50	
		301 or 401	SSa-1 SSa-1	8-12 8-12	50 50	50 50	
		301	SSa-1	8-12	50	50	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	T H R E A D		
					NEEDLE	BOBBIN/ LOOPER	COVER
5.	<u>Attach felt cushion to shell.</u> Stitch the felt cushion to the inside bottom raw edge of the blocked shell (see 3.3.1) with the ends of the felt overlapped not more than 1/2 inch.	502 or 503	SSa-1 SSa-1	6-10 6-10	50 50	50 50	
6.	<u>Join lining to shell.</u> a. Place the lining inside the shell with center front and back seams of the lining matching center front and back of shell, and with bottom edges even, stitch 1/8 to 1/4 inch from edge.	101 or 301 or 401	SSa-1 SSa-1 SSa-1	4-8 4-8 4-8	50 50 50	50 50 70	
7.	<u>Attach binding.</u> Finished appearance. The binding shall finish smooth and even in width. The ends of the binding shall be abutted at center back, 1/4 inch off center tolerance, of beret. The braid shall be free to move through the binding to allow for adjustment and the ends of the braid shall extend through the opening at center back. a. Overlap the binding (grain side up) 1/4 to 5/16 inch over bottom edge of lining and stitch 1/16 to 1/8 inch from edge of binding through lining, felt and shell. b. Fold binding to outside and with edge of binding covering the stitching outlined in operation 7.a. and with braid inserted within the fold, stitch binding 1/16 to 1/8 inch from edge. Do not catch braid in the stitching.	301 301	LSa-1 BSa-1	6-10 6-10	50 50	50 50	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	T H R E A D		
					NEEDLE	BOBBIN/ LOOPER	COVER
8.	<p><u>Prepare for packing.</u></p> <p>a. Trim thread ends and remove loose threads.</p> <p>b. Remove spots, stains, and shade tickets.</p> <p>c. Adjust braid and tie bow at back of beret.</p>						

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3.8 Measurements. The measurements of the finished berets shall conform to requirements specified in table III.

TABLE III. Finished measurements (in inches)

Beret size	Inside beret circumf. <u>1/</u>	Crown length <u>2/</u>	Crown width <u>3/</u>	Front quarter <u>4/</u>	Back quarter <u>5/</u>	Right and left quarter <u>6/</u>
6-3/8	20-1/8	9-7/8	9-3/8	3	2-1/2	2-3/4
6-1/2	20-1/2	10	9-1/2	3	2-1/2	2-3/4
6-5/8	20-7/8	10-1/8	9-5/8	3	2-1/2	2-3/4
6-3/4	21-1/4	10-1/4	9-3/4	3	2-1/2	2-3/4
6-7/8	21-5/8	10-3/8	9-7/8	3	2-1/2	2-3/4
7	22	10-1/2	10	3	2-1/2	2-3/4
7-1/8	22-3/8	10-5/8	10-1/8	3	2-1/2	2-3/4
7-1/4	22-3/4	10-3/4	10-1/4	3	2-1/2	2-3/4
7-3/8	23-1/8	10-7/8	10-3/8	3	2-1/2	2-3/4
7-1/2	23-1/2	11	10-1/2	3	2-1/2	2-3/4
7-5/8	23-7/8	11-1/8	10-5/8	3	2-1/2	2-3/4
7-3/4	24-1/4	11-1/4	10-3/4	3	2-1/2	2-3/4
7-7/8	24-5/8	11-3/8	10-7/8	3	2-1/2	2-3/4
<hr/>						
Tolerance $\pm 3/16$		$\pm 5/16$	$\pm 3/16$	$\pm 3/16$	$\pm 3/16$	$\pm 3/16$

- 1/ With the beret laid flat on the table, head opening up, measure inside beret circumference around bottom edge of binding on the finished beret.
- 2/ With the beret laid flat on the table, head opening down, measure from front (folded edge) to back (folded edge) as indicated by "A" in figure 1.
- 3/ With beret laid flat on table, head opening down, measure from side (folded edge) to side (folded edge) as indicated by "B" in figure 1.

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- 4/ With beret laid flat on table, head opening up, measure the front quarter from bottom (folded edge) of binding to the outside (folded edge) of crown as indicated by "C" in figure 1.
- 5/ With beret laid flat on table, head opening up, measure the back quarter from bottom (folded edge) of binding to the outside (folded edge) of crown as indicated by "D" in figure 1.
- 6/ With beret laid flat on table, head opening up, measure the right and left quarters from bottom (folded edge) of binding to the outside (folded edge) of crown as indicated by "E" in figure 1.

3.9 Workmanship. The finished berets shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the applicable quality levels.

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 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 document where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

* 4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the document shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance 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. When certificates of compliance are submitted, the Government reserves the right to inspect such items to determine the validity of the certification.

4.2 Classification of inspection.

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

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4.3 First article inspection. When a first article is required (see 6.2), it shall be examined for the defects specified in 4.4.3 and 4.4.4. The presence of any defect shall be cause for rejection of the first article.

4.4 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105

4.4.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this document or applicable purchase document.

4.4.2 Component testing. In addition to any testing required by referenced documents, testing shall be performed on the components listed in table IV, for the characteristics shown. The methods of testing specified in FED-STD-191, wherever applicable, and as listed in table IV, shall be followed. The lot shall be unacceptable if one or more sample units fail to meet any of the test requirements specified. The lot size expression and the sample size shall be in accordance with the following:

<u>Component</u>	<u>Lot size expressed as</u>	<u>Sample unit for testing</u>
Shell	Shells	12 shells
Badge stay	Pounds	3 square feet
Braid	Yards	1/4 yard

The number of sample units to be tested shall be determined as follows:

<u>Lot size</u>	<u>Sample size</u>
800 or less	2
801 up to and including 22,000	3
22,001 and over	5

TABLE IV. Component tests

<u>Component</u>	<u>Characteristic</u>	<u>Requirement reference</u>	<u>Test method</u>
Shell	Wool grade	3.3.1	ASTM D 3991 <u>1/</u>
	Wool content	3.3.1	2101
	Sheared finish	3.3.1	<u>1/</u>
	Color matching	3.3.1.1	9010 <u>2/</u>
	Colorfastness:	3.3.1.1	
	- Light		5660
	- Perspiration		5680
	- Wet drycleaning		5622
	- Crocking		5651
	Weight	3.3.1.3	5041
	Bursting strength	3.3.1.3	5120

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TABLE IV. Component tests (cont'd)

Component	Characteristic	Requirement reference	Test method
Badge stay:			
Alpha-cellulose fiberboard <u>3/</u> (when applicable)	Material identification	3.3.4	<u>4/</u>
	Water resistance	3.3.4	<u>5/</u>
	Thickness	3.3.4	5030
	Color	3.3.4	Visual <u>6/</u>
	Shrinkage	3.3.4	5550 <u>7/</u>
Braid			
	Material identification	3.3.6	<u>1/</u>
	Denier of yarn	3.3.6	<u>1/</u>
	Width	3.3.6	Measurement <u>6/</u>
	Number of ends	3.3.6	Count <u>6/</u>
	Colorfastness to wet drycleaning	3.3.6	5622

1/ Unless otherwise specified, certificate of compliance shall be submitted and will be acceptable for the stated requirement.

* 2/ Each of the twelve shells of the sample unit shall be tested as specified in the test method. The test specimen shall be one shell. Failure of one or more shells to match the standard sample shall be a test failure.

3/ Samples of badge stay shall be conditioned for 24 hours at a relative humidity of 50 ± 3 percent and a temperature of $70 \pm 2^{\circ}\text{F}$ prior to testing.

4/ A certificate of compliance shall be submitted to the contracting officer or his designated representative that the composition and the amount of impregnation are as specified.

5/ Water resistance - A drop of distilled water shall be placed on the surface of the badge stay board and shall not be completely absorbed in 1 hour. Three determinations shall be made per sample unit and the results reported as "pass" or "fail".

6/ For this examination, one determination shall be made per sample unit and the result reported as "pass" or "fail". All failures shall be described.

7/ The test procedure shall be modified to be adaptable for the type of material tested. The three test specimens shall be cut 4 inches by 8 inches and the average result reported as "pass" or "fail".

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4.4.3 End item visual examination. The end item shall be examined for the defects listed in Table V. The lot size shall be expressed in units of berets. The sample unit shall be one beret. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 6.5 for total (major and minor combined) defects.

TABLE V. End item visual defects

Examine	Defect	Classification	
		Major	Minor
Material defects and damages	a. Knitted shell:		
	1. Hole, cut, or tear:		
	- up to 1/8 inch inclusive		X
	- over 1/8 inch	X	
	2. Foreign matter caught in knitting		X
	3. Mend or darn		
	- 1/4 inch or less in diameter		X
NOTE: A darn or mend 1/4 inch or less will not be scored as a defect if it is neat and flat without puckers, pleats or exposed thread ends.			
	4. Wrinkle or permanent crease		
	b. Leather:		
	1. Hole, cut, or tear (a single nick in the edge of the leather which does not extend beyond the line of stitching shall not be considered a defect)	X	
	2. Open scratch	X	
	3. Abrasion, affecting grain	X	

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TABLE V. End item visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Material defects and damages (cont'd)	c. Lining:		
	1. Hole, cut, tear, or needle chew:		
	- up to 1/4 inch inclusive		X
	- over 1/4 inch	X	
	2. Weakening defect such as smash, multiple float, or loose slub:		
	- 1/4 up to 1/2 inch in size inclusive.		X
	- more than 1/2 inch in size	X	
	3. Mend or darn 1/4 inch or less in diameter		X
Cleanness	a. Spot or stain clearly noticeable:		
	- on outside	X	
	- over 1/4 inch on inside		X
	b. Thread ends not trimmed to 1/4 inch maximum length, or loose thread not removed throughout beret		X
	c. One or more shade tickets or shade markings not removed		X
Cutting	Any component part not cut in conformance with directional lines on pattern or in accordance with specified requirements (unless otherwise classified herein)		X
Components and assembly	a. Any component part or required operation omitted (unless classi- fied herein)	X	
	b. Any operation not performed as specified (unless otherwise classified herein)		X

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TABLE V. End item visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Seams and stitching	a. Accuracy of seaming:		
	1. Seams puckered, twisted, or pleated		X
	2. Part of beret caught in stitching of unrelated operation:		
	- up to 1/4 inch inclusive		X
	- more than 1/4 inch	X	
	3. Ends of stitching when not caught other seams or stitching not backtacked or backtacked less than 1/2 inch		X
	4. Thread breaks (all stitch types) stitched less than 1/2 inch back of break		X
	5. Ends of a continuous line of stitching not overlapped or overlapped less than 1/4 inch		X
	6. Loose tension:		
	- more than 1/2 inch in length but not more than 3 inches		X
	- more than 3 inches in length	X	
	7. Tight tension (stitches break when normal tension is applied lengthwise to seam)		X
	b. Gauge of stitching:		
	1. Irregular, i.e., unevenly gauged		X
	2. Not within range specified or varying more than 1/16 inch when no range is specified		X

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TABLE V. End item visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Seams and stitching (cont'd)	c. Skipped or run-off stitches: - 1/4 to 1/2 inch long inclusive - more than 1/2 inch	X	X
	d. Broken stitches: - up to 1/4 inch inclusive - more than 1/4 inch	X	X
	e. Raw edge: - 1/4 to 1 inch inclusive - more than 1 inch	X	X
	f. Seams and stitch type not as specified		X
	g. Stitches per inch:		
	1. One stitch less than minimum specified		X
	2. Two or more stitches less than minimum specified	X	
	3. One stitch more than maximum specified		X
	4. Two or more stitches more than maximum specified	X	
Outside beret	Binding:		
	1. Twisted, puckered, or pleated		X
	2. Binding not abutted at center back or overlapped more than 1/8 inch		X
	3. Drawcord caught in stitching		X
	4. Drawcord not tied in bow		X

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TABLE V. End item visual defects (cont'd)

<u>Examine</u>	<u>Defect</u>	<u>Classification</u>	
		Major	Minor
Inside beret	a. Lining not securely caught in stitching	X	
	b. Badge stay not positioned on left front or positioned more than 1-1/4 or less than 3/4 inches from center front seam		X
	c. Badge stay caught in the binding	X	
	d. Label missing, incorrect, or illegible	X	
	e. Label not attached as specified, misplaced or stitching through the printing		X
	f. Label contains a hole, feed notch, or scratched edge		X

4.4.4 End item dimensional examination. The end item shall be examined for conformance to the measurements specified in table III. Any dimension not within the specified tolerance shall be classified as a defect. The lot size shall be expressed in units of one beret. The sample unit shall be one beret. The inspection level shall be S-3 and the AQL, expressed in defects per hundred units, shall be 4.0.

4.4.5 Packaging examination. The fully packaged end items shall be examined for the defects listed below. The lot size shall be expressed in units of shipping containers. The sample unit shall be one shipping container fully packaged. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

<u>Examine</u>	<u>Defect</u>
Marking (Exterior and interior)	Omitted; incorrect; illegible; of improper size. location, sequence, or method of application.
Materials	Any component missing, damaged, or not at specified.
Workmanship	Inadequate application of components, such as: Incomplete closure of container flaps, loose strapping, inadequate stapling, or improper taping.

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<u>Examine</u>	<u>Defect</u>
Workmanship (cont'd)	Bulged or distorted container. Open and non-continuous heat sealed seams and closure of polyethylene bag.
Content	Number of intermediate packs per shipping container is more or less than required. Number of berets per intermediate pack is more or less than required. <u>1/</u> Size shown on one or more berets not as specified on intermediate or outer container. <u>1/</u>

1/ For this defect, two intermediate packs from each container in the sample shall be examined.

- 4.4.6 Palletization examination. The fully packaged and palletized end items shall be examined for the defects listed below. The lot size shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load, fully packaged. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

<u>Examine</u>	<u>Defect</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 limits.
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.

5. PACKAGING

5.1 Preservation. Preservation shall be level A or Commercial as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 Unit packing. Each beret shall be inserted in a flat style clear polyethylene film bag of 0.00125 inch thickness (± 25 percent tolerance). The polyethylene bag shall be formed with heat sealed seams that are straight, continuous, and parallel to each other and the formed edges of the bag. The bag shall measure 12 by 11-1/2 inches. The unsealed opening shall be at the smaller dimension of the bag.

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5.1.1.2 Intermediate packing. Twelve berets of one size and class only, bagged as specified in 5.1.1.1, shall be packed flat in an intermediate paper-board box conforming to type II, (lid corner stayed), variety 1, class D, of PPP-B-676. Inside dimensions of the box shall be 11-1/2 inches in length, 11 inches in width, and 7-1/2 inches in depth. The depth of the cover shall be not less than 1 inch. The box cover shall be secured with two minimum 5-inch long strips of gummed paper tape of 2-inch minimum width conforming to type III, class 2, grade B of PPP-T-45. The tape shall be applied at the center of the length opening and extend equally on the cover and down each side. As an alternate, a fiberboard box may be used conforming to style RSC, type CF (variety SW) or SF, class domestic, grade 125 of PPP-B-636. Box closure shall be in accordance with method II as specified in the appendix of PPP-B-636.

* 5.1.2. Commercial packing. The berets shall be preserved in accordance with ASTM D 3951.

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

* 5.2.1 Level A. Forty-eight berets of one size and class only, preserved as specified in 5.1, shall be packed in a fiberboard shipping container conforming to style RSC, grade V2s of PPP-B-636. Level A intermediate packs shall be packed flat, two in length, one in width, and two in depth within a shipping container. Inside dimensions of each shipping container shall approximate 23 inches in length, 12 inches in width, and 15-1/2 inches in depth. Approximate dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced as specified in the appendix of PPP-B-636 except that the inspection shall be in accordance with 4.4.5. Toward the end of the contract or when there are less than the required amount per container of the same size, mixed sizes may be packed within the same shipping container. Shipping containers shall be arranged in unit loads in accordance with MIL-L-35078 for the type and class of load specified (see 6.2). Strapping shall be limited to nonmetallic strapping, except for type II, class F loads.

5.2.2 Level B. Forty-eight berets of one size and class only, preserved as specified in 5.1, shall be packed in a fiberboard shipping container conforming to style RSC, type CF (variety SW) or SF, class domestic, grade 200 of PPP-B-636. Level A intermediate packs shall be packed flat, two in length, one in width, and two in depth within a shipping container. Inside dimensions of each shipping container shall approximate 23 inches in length, 12 inches in width, and 15-1/2 inches in depth. Approximate dimension are furnished as a guide only. Each shipping container shall be closed in accordance with method II as specified in the appendix of PPP-B-636 except that the inspection shall be in accordance with 4.4.5. Toward the end of the contract or when there are less than the required amount per container of the same size, mixed sizes may be packed within the same shipping container.

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5.2.2.1 Weather-resistant fiberboard containers. When specified (see 6.2), the shipping container shall be a grade V3c, V3s, or V4s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.5.

5.2.3 Commercial packing. Berets, preserved as specified in 5.1, shall be packed in accordance with ASTM D 3951.

- * 5.3 Palletization. When specified (see 6.2), berets packed as specified in 5.2.2 and 5.2.3 shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet types shall be type I (4-way entry), type IV or type V in accordance with MIL-STD-147. Pallets shall be fabricated from wood groups I, II, III, or IV of MIL-STD-731. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means K and L or film bonding means O or P.. Pallet pattern shall be number 3 in accordance with the appendix of MIL-STD-147. Interlocking of loads shall be effected by reversing the pattern of each course.

5.4 Marking. In addition to any special marking required by the contract intermediate packs, shipping containers, and palletized unit loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable.

5.4.1 Polyethylene bagged unit packs. Polyethylene bagged unit packs shall have the required identification information legibly printed or stamped in black directly on the bag across the center face or on a white paper label inserted within the bag so as to permit ready identification.

STOCK NUMBER
ITEM DESCRIPTION
SIZE
QUANTITY

(or) When the berets are labeled as specified in 3.3.7 and the markings are legible through the polyethylene bags, the interior paper labels or the markings of the polyethylene bags are not required.

5.4.2 Labels, mixed sizes. Each shipping container, packed with mixed sizes only, shall have securely attached to the end and side, directly under the printing or stenciling, a white paper label 5 by 4 inches with the words 'MIXED NSN's' plainly stamped or printed thereon and under these words shall be legibly stamped or printed the correct quantity and NSN's contained therein.

6. NOTES

6.1 Intended use. The berets are intended for wear by designated military personnel of the Department of Defense.

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* 6.2 Ordering data. Acquisition documents should specify the following:

- a. Title, number, and date of this document.
- b. Classes and sizes required (see 1.2).
- c. When a first article is required (see 3.2, 4.3 and 6.5).
- d. Selection of applicable levels of preservation and packing (see 5.1 and 5.2).
- e. Type and class of unit load required (see 5.2.1)
- f. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
- g. When palletization is required (see 5.3).

6.3 Samples. For access to sample of end item and shade samples, address the contracting activity issuing the invitation for bids.

6.4 Yarn. A yarn 40 grains to 20 yards made of a blend of 70 percent carbonized noils and 30 percent either lambs wool or carbonized broken tops, piece dyed, has been found to be satisfactory.

" 6.5 First article. When a first article sample is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209. The first article should be a preproduction 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 instruments regarding arrangements for selection, inspection, and approval of the first article.

6.6 Subject term (key word) listing.

Beret
Clothing
Headwear
Man's
Wool

6.7 Changes from previous issue. The margins of this document 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 notations. 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.

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Custodians:

Army - GL
Air Force - 11

Review activities:

Army - MD
Air Force - 82, 99
DLA - CT

User activity:

Air Force - 45

Preparing activity:

Army - GL

Project No. 8405-0030

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER

MIL-B-43172E

2. DOCUMENT TITLE

Beret, Man's, Wool

3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION (Mark one)

☐

VENDOR

☐

USER

☐

MANUFACTURER

☐

OTHER (Specify) _____

b. ADDRESS (Street, City, State, ZIP Code)

5. PROBLEM AREAS

a. Paragraph Number and Wording

b. Recommended Wording

c. Reason/Rationale for Recommendation

6. REMARKS

7a. NAME OF SUBMITTER (Last, First, MI) - Optional

b. WORK TELEPHONE NUMBER (Include Area Code) - Optional

c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional

8. DATE OF SUBMISSION (YYMMDD)