

INCH-POUND

MIL-C-44107C  
25 November 1991  
SUPERSEDING  
MIL-C-44107B  
8 August 1990

## MILITARY SPECIFICATION

### COVER, GROUND TROOPS-PARACHUTISTS HELMET

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

#### 1. SCOPE

1.1 Scope. This specification covers a ground troops-parachutists helmet cover.

\* 1.2 Classification. The helmet cover shall be of the following classes and sizes as specified (see 6.2).

- Class 1 - Woodland Camouflage Pattern
- Class 2 - Snow Camouflage, White Arctic
- Class 3 - Deleted (see 6.6)
- Class 4 - Desert Camouflage Pattern, Daytime (3 color)

#### Sizes:

- X-Small/Small
- Medium/Large
- X-Large

#### 2. APPLICABLE DOCUMENTS

##### 2.1 Government documents.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5019 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8415

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

MIL-C-44107C

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

SPECIFICATIONS

FEDERAL

- A-A-203 - Paper, Kraft, Untreated
- A-A-50198 - Thread, Gimp Cotton Buttonhole
- A-A-50199 - Thread, Polyester Core, Cotton- or Polyester-Covered
- DDD-L-20 - Label: For Clothing, Equipage, and Tentage, (General Use)
- PPP-B-636 - Boxes, Shipping, Fiberboard

MILITARY

- MIL-T-3530 - Thread and Twine, Mildew Resistant or Water Repellent Treated
- MIL-C-3924 - Cloth, Oxford, Cotton Warp and Nylon Filling, Quarpel Treated
- MIL-T-5038 - Tape, Textile and Webbing, Textile, Reinforcing, Nylon
- MIL-F-21840 - Fastener Tapes, Hook and Loop, Synthetic
- MIL-L-35078 - Loads, Unit: Preparation of Semiperishable Subsistence Items; Clothing, Personal Equipment and Equipage; General Specification For
- MIL-C-44031 - Cloth, Camouflage Pattern: Woodland, Cotton and Nylon
- MIL-C-44034 - Cloth, Twill, Camouflage Pattern, Cotton and Nylon for Desert Uniform

STANDARDS

FEDERAL

- FED-STD-595 - Colors Used in Government Procurement
- FED-STD-751 - Stitches, Seams, and Stitchings

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
- MIL-STD-129 - Marking for Shipment and Storage

MIL-C-44107C

MIL-STD-147 - Palletized Unit Loads  
MIL-STD-731 - Quality of Wood Members for Containers and Pallets

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

\* 2.2 Non-Government 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 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).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 3951 - Standard Practice for Commercial Packaging

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1187.)

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

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

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

3.2 Guide sample. Samples, when furnished, are solely for guidance and information to the contractor (see 6.4). Variations from this specification may appear in the sample in which case this specification shall govern.

3.3 Material. It is encouraged that recycled material be used when practical as long as it meets the requirements of this specification.

3.3.1 Basic material.

3.3.1.1 Class 1 cover. Cloth for the class 1 cover shall be cotton and nylon, woodland camouflage pattern conforming to class 1 of MIL-C-44031. Reinforcements for buttonholes may be cut from first quality ground shade cloth or bleachery seconds of camouflage printed cloth.

MIL-C-44107C

3.3.1.2 Class 2 cover. Cloth for the class 2 cover shall be cotton warp and nylon filling oxford cloth, quarpel treated, conforming to class 1 of MIL-C-3924.

\* 3.3.1.3 Class 4 cover. Cloth for the class 4 cover shall be cloth, twill, camouflage pattern (3 color), cotton and nylon conforming to class 3 of MIL-C-44034.

\* 3.3.2 Tape, nylon. The nylon tape shall conform to type III, 3/4 inch wide of MIL-T-5038. The color of the tape for the specific class of cover shall be as follows:

Class 1	- Camouflage Green 483
Class 2	- Bleached White
Class 4	- Tan 380

\* 3.3.3 Tape, fastener, nylon. The nylon fastener tape shall conform to type II, class 1, 3/4 inch wide of MIL-F-21840. The color of the fastener tape for the specific class of cover shall be as follows:

Class 1	- Camouflage Green 483
Class 2	- White 3054
Class 4	- Tan 380

\* 3.3.4 Thread, polyester core, cotton- or polyester-covered. The thread for all stitching shall be ticket numbers 50 and 70, 2 or 3 ply conforming to A-A-50199. The color of the thread for the specific class of cover shall be as follows:

Class 1	- Camouflage Green 483 1/
Class 2	- Bleached White, AH, C.A. 66050
Class 4	- Khaki P-1, Cable No. 66019

1/ The color shall approximate color chip 34094 of FED-STD-595.

Thread used for the class 2 cover shall be water repellent treated in accordance with type II, class 3 of MIL-T-3530. The dyed thread required for the class 1 and class 4 covers shall show colorfastness to laundering equal to or better than the standard sample. When no standard sample is available, the dyed thread shall show "good" fastness to laundering.

\* 3.3.5 Gimp, cotton. The cotton gimp for reinforcing eyelet-end tapered bar type buttonholes on the cover facing shall conform to types I or II, size 8 of A-A-50198. The color for class 1 shall be Camouflage Green 483 approximating color chip 34094 of FED-STD-595 the color for class 2 shall be Bleached White, AH, C.A. 66050 and the color for class 4 shall be Khaki P-1, Cable No. 66019.

### 3.4 Construction.

3.4.1 Stitches, seams, and stitching. All stitches, seams, and stitching shall conform to FED-STD-751. Where two or more seam or stitch types are given for the same part of an operation, any one of them may be used. Seam allowances shall be maintained with seams sewn so that no raw edges, run-offs, twists, pleats, puckers, or open seams result. All seams shall start and finish evenly. Trimming shall be as specified in operations and governed by tolerances cited. The edge and top stitching shall be uniformly gaged. Seams required to be worked out, or that have a depth between the fold of 1/16 inch or more shall be considered a defect.

3.4.1.1 Type 301 stitching. Ends of all stitching shall be backstitched or overstitched 1/2 inch minimum except when caught in other seams or stitching. Thread tension shall be maintained so that there will be no loose stitching resulting in loose bobbin or top thread, or excessively tight stitching resulting in puckering of the material sewn. The lock shall be embedded in the materials sewn.

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

a. When thread breaks or bobbin run-offs occur during sewing, the stitching shall be repaired by restarting the stitching a minimum of 3/4 inch back of the end of the stitching. 1/

b. Thread breaks 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 3/4 inch in back of the defective area, continue over the defective area, and continue a minimum of 3/4 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 repairs, the ends of the stitching are not required to be backstitched.

3.4.1.2 Types 502, 503, 504, 505, 515, 516, and 519 stitching. Thread tension shall be maintained so that there will be no loose stitching. All repairs shall be in accordance with 3.4.1.1.1.a. and 3.4.1.1.1.b.

### 3.4.1.3 Buttonholes.

3.4.1.3.1 Cover crown. The buttonholes in the cover crown shall be straight-cut, tacked at each end with a minimum of four crossover stitches and with a finished cut-length of  $3/4 \pm 1/16$  inch. The buttonholes shall be clean-cut and correctly positioned with the stitching securely caught in the fabric.

3.4.1.3.2 Cover facing. The buttonholes in the cover facing shall be eyelet-end tapered bar type worked over the gimp specified in 3.3.5 or straight cut as specified in 3.4.1.3.1, with not less than four tacking stitches at bar end (not counting crossover stitch). The purling shall be on the outside surface of the facing. The cut lengths shall be as specified in operation 5.d of table I. The buttonholes shall be clean-cut with the stitching securely caught in the fabric.

3.4.1.4 Use of automated apparel equipment. Automated apparel equipment may be used to perform any of the operations specified in table I, providing that the seam and stitch type are as specified and the finished component conforms to the required configuration. When a government furnished shaper pattern is forwarded, the component shall conform to that pattern.

3.4.1.5 Thread ends. Unless otherwise specified all thread ends shall be trimmed to a length of not more than 1/4 inch.

3.4.2 Fusing of ends of nylon tape. All ends of nylon tape shall be fused. The apparatus used to fuse the tape ends shall be capable of providing sufficient heat to provide a smooth edge. The cut ends of the tape yarns shall be fused together.

\* 3.4.3 Identification label. The cover shall have an identification label conforming to type III or IV, class 5 of DDD-L-20, except that the printing shall be on four lines with the stock number and the size on the same line. The label shall be applied in the location specified in table I, operation 9.

3.4.4 Repairs. Repairs such as mends, darns, or patches are not allowed to be made to the cover.

3.5 Patterns. Standard patterns, which provide the necessary seam allowances will be furnished by the Government and shall be used by the contractor as a guide for making working patterns only. The standard patterns shall not be altered in any way and the working patterns shall be cut to conform exactly with the standard patterns.

3.5.1 List of pattern parts. The component parts of the cover shall be cut from the material as specified below:

<u>Material</u>	<u>Nomenclature</u>	<u>Cut parts</u>
Cloth	Crown, center	1
	Crown, side	2
	Facing, front	1
	Facing, back	1

3.6 Manufacturing operations requirements. Unless otherwise specified, the cover shall be manufactured by and with the use of all operations specified in table I. The contractor is not required to follow the exact

MIL-C-44107C

sequence of operations. Any additional basting or holding stitches used to facilitate manufacture is permissible provided the thread does not show on the finished cover. Maximum tolerance allowed is  $\pm 1/8$  inch.

\* 3.6.1 Figure. Figure 1 is furnished for guidance and information purposes only. If there are any inconsistencies between the written specification and the figure, the written specification shall govern.

NO.	TABLE I. MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD	
					NEEDLE	BOBBIN/ LOOPER COVER
1.	<p><u>Cutting.</u></p> <p>Cut fabric components in strict accordance with patterns furnished.</p>					
2.	<p><u>Replacement of defective components.</u></p> <p>During the spreading, cutting, and manufacturing process, components having material defects or damages that are classified as defects in 4.4.3 shall be removed from production and replaced with non-defective and properly matched components.</p>					
3.	<p><u>Assembling of camouflage printed components.</u></p> <p>Components cut from camouflage printed material shall be assembled with the printed surface facing to the outside of the completed cover.</p>					
4.	<p><u>Make crown.</u></p> <p>a. Make seven buttonholes on each side crown piece and twelve buttonholes on the center crown piece in locations shown on patterns, <math>\pm 3/16</math> inch. Buttonholes shall be straight-cut, <math>3/4 \pm 1/16</math> inch long.</p>	Button-hole		64 min. per buttonhole including tacks	50	70
*	<p>NOTE: Operation 4a is applicable to class 1 and class 4 covers only.</p>					

NATICK Form 903  
 1 Dec 76 EDITION OF 1 OCT 76 WILL BE USED UNTIL EXHAUSTED.



NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER COVER	
4.	<p><u>Make crown.</u> (cont'd)</p> <p>b. Join the crown sides to the crown center by superimposing the edges evenly within 1/16 inch and stitch from bottom edge of crown center to the opposite bottom edge. Bottom edges of sides and center pieces shall finish aligned within 1/8 inch. Stitch gauge for overedge stitching shall be 3/16 to 1/4 inch and stitch margin for the safety stitch shall be 5/16 + 1/16 inch. Safety stitch cut off will be 1/8 + 1/16 inch.</p>	515, 516 or 519	SSa-2	8-12	50 (chain stitching)	70 (over edge stitching)	
5.	<p><u>Make facing.</u></p> <p>a. Overedge the ends of the front and back facings. Overedge stitch cut off will be 1/8 ± 1/16 inch.</p> <p>b. Join the front and back pieces at both ends by superimposing the ends and side edges evenly within 1/16 inch and stitching across the ends with stitch margin 3/8 ± 1/16 inch.</p> <p>c. Overedge inner peripheral edge with stitch gauge 3/16 to 1/4 inch. The end seams shall be opened flat when caught by the overedge stitching. Overedge stitch cut off will be 1/8 ± 1/16 inch.</p> <p>d. Cut four 1-1/4 + 1/8 inches by 2 + 1/8 inches reinforcements from the base fabric for buttonhole reinforcements. Reinforcements may be cut from ground shade cloth or bleached seconds of ground cloth conforming to MIL-C-44031. Position each reinforcement</p>	502, 503, 504, or 505  301  502, 503, 504, or 505  301	Efd-1  SSa-1  Efd-1  ---	10-14  8-10  10-14 10-14 8-12 8-12  8-10	70  50  70 70 70 70  50		

NATICK Form 903

1 Dec 76 EDITION OF 1 OCT 76 WILL BE USED UNTIL EXHAUSTED.

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
5.	<p><u>Make facing.</u> (cont'd)</p> <p>centrally within 1/8 inch over the location for the buttonholes located on the pattern and on the non-camouflage side of the fabric, except that when ground shade cloth is used it shall be on the back side of the facing. Stitch each reinforcement to facing with row of stitching around all edges with stitch margin no greater than 1/4 inch.</p> <p>e. Make four 1-1/4 to 1-3/8 inch straight-cut or eyelet-end taper-bar type buttonholes in the location shown on the pattern, ± 1/8 inch. Eyelet-end of buttonholes at the sides shall face towards the front of the facing and at the rear shall face towards the center back.</p>	Button-hole	--	110 min. per buttonhole including tacks	50	70	
6.	<p><u>Join facing to crown.</u></p> <p>a. With outside surface of crown facing up and inside surface of facing component facing up, position facing on crown with front center of facing aligned with front center of crown within 1/8 inch. With the edges of the facing and crown aligned, join the two components together around entire periphery. Stitch gauge for overedge stitching shall be 3/16 to 1/4 inch and stitch margin for the safety stitch shall be 5/16 ± 1/16 inch. During the stitching operation the materials shall be evenly fed into the machine such that the centers of the facing and crown components are aligned within 1/4 inch. Safety stitch cut off will be 1/8 ± 1/16 inch.</p>	515, or 516, or 519	SSa-2	8-12	50 (chain 70 (over edge stitching)	70	hing)

NATICK Form 903  
 1 Dec 76 EDITION OF 1 OCT 76 WILL BE USED UNTIL EXHAUSTED.

NO.	TABLE I. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
6.	<p><u>Join facing to crown.</u> (cont'd)</p> <p>b. Turn seam allowance toward facing and raise stitch 1/16 to 1/8 inch around entire periphery.</p>	301	1Sq-2 (Step b)	8-10	50	50	
7.	<p><u>Make retaining straps.</u></p> <p>a. Cut six lengths of 3/4 inch wide nylon tape, four each <math>6 \pm 1/8</math> inches long and two each <math>4 \pm 1/8</math> inches long. Cut six lengths of 3/4 inch wide hook fastener tape <math>1 \pm 1/16</math> inch long.</p> <p>b. On one end of each strap position hook fastener tape with the selvage edges of the fastener tape positioned along the selvage edges of the strap. Stitch fastener tape to strap with a <math>5/8</math> by <math>5/8 \pm 1/16</math> inch box with an x-pattern centrally located on the fastener tape such that at the end of the strap the fastener tape is not sewn down for a distance of 1/4 inch which functions as an anti-pull tab. When stitching the box with the x-pattern, place a double stitch on the seams perpendicular to the selvage edges only.</p>	301	--	8-10	50	50	
8.	<p><u>Attach retaining straps.</u></p> <p>a. The four long retaining straps are attached to the rear portion of the facing and the two short retaining straps are attached to the front portion of the facing in the locations shown on the pattern.</p> <p>b. Cut six lengths of 3/4 inch wide loop fastener tape <math>1 \pm 1/16</math> inch long.</p>						

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD	
					NEEDLE	BOBBIN/ LOOPER COVER
8.	<p><u>Attach retaining straps.</u> (cont'd)</p> <p>C. With the facing outside surface facing up and with the surface of the retaining strap with the hook fastener tape attached also facing up, position end of strap (without fastener tape) on facing in location shown on pattern, <math>\pm 1/8</math> inch. Position loop fastener tape on end of retaining strap with selvage edges of fastener tape positioned along the selvage edges of the strap. Stitch through fastener tape, retaining strap and facing with a <math>5/8 \pm 1/16</math> inch box with an x-pattern located centrally on the fastener tape. When stitching the box with the x-pattern, place a double stitch on the seams perpendicular to the selvage edges only.</p> <p>NOTE: As an option the strap may be tacked to the facing prior to stitching with the box pattern.</p>	301	--	8-10	50	50
9.	<p><u>Apply identification label.</u></p> <p>The identification label shall be applied on the top inside surface of the crown center in the area with no buttonholes.</p>					
10.	<p><u>Clean cover.</u></p> <p>Cut and remove all thread ends as specified. Remove all spots and stains.</p>					

NATICK Form 503  
 1 Dec 76 EDITION OF 1 OCT 76 WILL BE USED UNTIL EXHAUSTED.

3.7 Finished measurements. The finished measurements shall conform to table II. The measurements of the helmet cover shall be taken with the cover folded in half and laid flat with the bottom edges even.

TABLE II. Finished measurements for helmet cover (inches)

Size	1/2 Circumference <sup>1/</sup>	Height <sup>2/</sup>	Tolerance
X-Small/Small	17-3/4	9-1/4	+ 1/2
Medium/Large	18-1/8	9-1/2	+ 3/4, -0
X-Large	18-1/2	10-1/2	+ 3/4, -0

- 1/ The circumference measurement shall be taken from the back center of the crown panel along the contour of the helmet to the center of the front crown panel.
- 2/ The height measurement shall be taken from the top mid point of center to a mid point on lower side panel.

3.8 Workmanship. The finished cover shall conform to the quality of product established by this specification and the occurrence of defects shall not exceed the applicable acceptable quality level.

#### 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 (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

MIL-C-44107C

4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points in the manufacturing process necessary to ensure compliance with all dimensional requirements.

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

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

4.3 First article inspection. When a first article is required (see 3.1 and 6.2), it shall be examined for the defects specified in 4.4.3 and 4.4.4.

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 specification or applicable purchase document.

4.4.2 In-process inspection. The fabric cut parts shall be inspected during the cutting process to determine that parts are cut properly with respect to size and that locations of components are marked in the required locations. Whenever nonconformance is noted, corrections shall be made to the parts affected and lot in-process. Parts which cannot be corrected shall be removed from production.

~~4.4.3~~ End item visual examination. The end items shall be examined for the defects listed in table III. The lot size shall be expressed in units of covers of one class only. The sample unit shall be one complete cover. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 2.5 for major defects and 10.0 for total (major and minor combined) defects.

TABLE III. End item visual defects

Examine	Defect	Classification	
		Major	Minor
Cloth	Any hole, cut, or tear	101	
	Any broken or missing yarns or multiple floats	102	
	Any mend, darn, or patch	103	
	Any needle chew	104	

## MIL-C-44107C

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

Examine	Defect	Classification	
		Major	Minor
Fastener tape	Any cut or tear	105	
	Hooks crushed affecting closure	106	
Tape, nylon	Any hole, cut, or tear	107	
Seams and stitchings:			
Open seams	Up to and including 1/2 inch		201
	More than 1/2 inch	108	
NOTE: A seam shall be classified as an open seam when one or more stitches joining a seam are broken, or when two or more consecutive skipped or runoff stitches occur.			
Raw edges (except where required or otherwise classified herein)	More than 1/4 inch when securely caught in stitching		202
	NOTE: Raw edges not securely caught in stitching shall be classified as open seams.		
Seam and stitch type	Wrong seam or stitch type	109	
	Seam pleated or excessively puckered, clearly noticeable		203
Stitch tension	Tension loose, resulting in loose bobbin or top thread		204
	Tension excessively tight, resulting in puckering of material		205
Stitches per inch (all types of stitching)	One stitch less than minimum specified		206
	Two or more stitches less than minimum specified	110	
	One or more stitches in excess of maximum specified		207

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

Examine	Defect	Classification	
		Major	Minor
Seams and stitchings: (cont'd)			
Stitches per inch (all types of stitching) (cont'd)	NOTE: Variation in the number of stitches per inch caused by operator speeding up the machine and pulling the material in order to sew over heavy places, or in turning corners shall be classified as follows:  - Within the minor defect classification - no defect - Within the major defect classification - minor defect		
Rows of stitching	Any row omitted	111	
Thread breaks, skipped stitches, or run-offs	Overstitched less than 3/4 inch in each direction beyond the defective stitching area		208
	NOTE: On all types of stitching, thread breaks or two or more consecutive skipped or run-off stitches not overstitched shall be classified as open seams.		
Stitching ends (on type 301 stitching)	Ends of stitching not secured as specified (except when caught in other stitching or turned under in a hem)		209
Buttonhole(s)	On cover crown		
	- Up to two omitted		210
	- Three or more omitted	112	
	On cover facing		
	- One or more omitted	113	
	Stitches not securely caught in fabric, causing stitches to pull away from fabric	114	
	One or more broken stitches or two or more skipped stitches		211
	Tack on one or both ends omitted		212
	Uncut		213



## MIL-C-44107C

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

Examine	Defect	Classification	
		Major	Minor
Buttonhole(s) (cont'd)	Not specified type		214
	Gimp omitted on any cover facing eyelet end tapered bar type buttonhole		215
Components and assembly	Any component caught in any unrelated operation of stitching (not otherwise classified herein)	115	
	Any component part omitted or not attached as specified (not otherwise classified herein)	116	
	Hook tape not attached with anti-pull tab	117	
	Any fabric component assembled with camouflage printed surface facing inside	118	
	Any reinforcement for buttonholes on facing omitted	119	
	Any exposed drill hole	120	
Cleanness	Any spot or stain clearly noticeable; thread ends not trimmed throughout, as specified		216
Identification markings	Omitted, incorrect, illegible, not as specified, or not in location specified		217

4.4.4 End item dimensional examination. The end items shall be examined for conformance to all 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 complete covers of one class only. The sample unit shall be one complete cover. The inspection level shall be S-3 and the AQL, expressed in terms of 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.

MIL-C-44107C

<u>Examine</u>	<u>Defect</u>
Marking (exterior and unit packs)	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application
Materials	Any component missing, damaged, or not as specified
Workmanship	Inadequate application of components, such as: incomplete sealing or closure of flap, improper taping, loose strapping, or inadequate stapling Bulged or distorted container
Content	Number of covers per bundle not as specified <u>1</u> / Number of bundles per shipping container not as specified

1/ For this defect one bundle from each shipping 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 Load not bonded as specified
Weight	Exceeds maximum load limits
Marking	Omitted, incorrect, illegible, of improper size, location, sequence, or method of application

5. PACKAGING

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

5.1.1 Level A preservation. Twenty covers of one class and size only, with tapes inside or in attached position, shall be evenly stacked with inside facing up and last one facing down to form a neat bundle. The bundle shall be securely crosstied with cotton tape or twine.

5.1.2 Commercial preservation. The covers 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 packing. Two-hundred and forty covers of one class and size only, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, grade V2s of PPP-B-636. The inside of each shipping container shall be fitted with a box liner conforming to type CF, class weather-resistant, variety DW, grade V15c of PPP-B-636. Each container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight kraft paper conforming to A-A-203. Each fiberboard 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 inspection shall be in accordance with 4.4.5. 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 packing. Two-hundred and forty covers, of one class and size only preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, type CF (variety SW) or SF, class domestic, grade 275 of PPP-B-636. The inside of each shipping container shall be fitted with a box liner conforming to type CF, class domestic, variety DW, grade 275 of PPP-B-636. Each container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight kraft paper conforming to A-A-203. Each fiberboard container shall be closed in accordance with method II as specified in the appendix of PPP-B-636, except that inspection shall be in accordance with 4.4.5.

5.2.2.1 Weather-resistant fiberboard shipping containers. When specified (see 6.2), the fiberboard 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 inspection shall be in accordance with 4.4.5.

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

5.3 Palletization. When specified (see 6.2), covers, packed as specified in 5.2.2 or 5.2.3 shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet type 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 MEL-STD-731. Each prepared load shall be bonded with primary and secondary straps in accordance with

MIL-C-44107C

bonding means C and D or film bonding means F or G. Pallet pattern shall be in accordance with the appendix of MIL-STD-147. If the container is of a size which does not conform to any of the patterns specified in MIL-STD-147, the pallet pattern used shall first be approved by the contracting officer.

5.4 Marking. In addition to any special marking required by the contract or purchase order, unit packs, shipping containers and palletized unit loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable, except that only each third unit pack shall have attached a manila colored paper shipping tag for the identification information.

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 covers are intended for camouflaging the ground troops-parachutists helmet.

6.2 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Class and size required (see 1.2).
- c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
- d. When a first article sample is required (see 3.1, 4.3 and 6.3).
- e. Levels of preservation and packing (see 5.1 and 5.2).
- f. Type and class of unit load required (see 5.2.1).
- g. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
- h. When palletization is required (see 5.3).

6.3 First article. When a first article is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209-4. 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 acquisition documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Sample. For access to standard samples, address the contracting activity issuing the invitation for bids or request for proposal.

\* 6.5 Subject term (key word) listing.

Camouflage  
Headware

Desert  
Snow  
Woodland

6.6 Supersession data. The class 3 desert camouflage pattern (6 color), cotton/nylon twill cover has been deleted as it is no longer required.

6.7 Changes from previous issue. The margins of this specification are marked with asterisks 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 specification based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - GL  
Navy - NU  
Air Force - 99

Preparing activity:

Army - GL  
(Project 8415-0826)

Review activities:

Army - MD  
Navy - MC  
Air Force - 82  
DLA - CT

User activity:

~~Air Force - 45~~

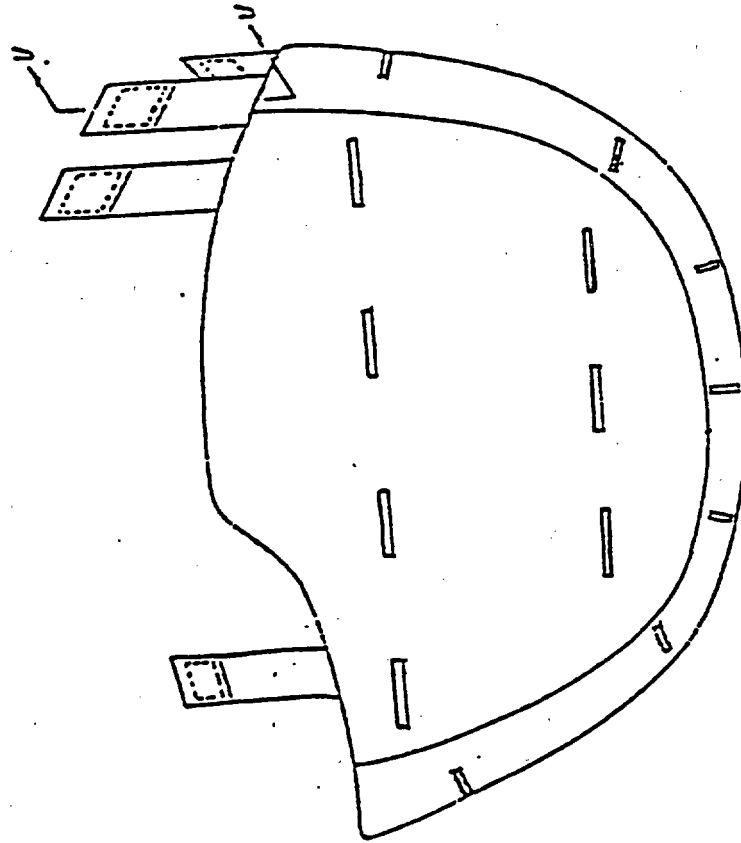


FIGURE 1 - COVER, GROUND TROOPS - PARACHUTISTS HELMET

SECTION A-A

