

INCH-POUND  
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Superseding  
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## MILITARY SPECIFICATION

### HEADBAND, 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 one type of headband for the ground troops'-parachutists' helmet (see 6.1).

1.2 Classification. The headband assembly shall be of the following sizes as specified (see 6.2).

X-Small	(XS)
Small - Medium - Large	(S-M-L)
X-Large	(XL)

#### 2. APPLICABLE DOCUMENTS

##### 2.1 Government 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 8470

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

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 are those listed in the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation. (see 6.2)

## SPECIFICATIONS

### FEDERAL

- A-A-50083 - Bag, Plastic, Folded Garment
- PPP-B-636 - Boxes, Shipping, Fiberboard
- PPP-T-45 - Tape, Gummed, Paper. Reinforced and Plain, for Sealing and Securing

### MILITARY

- MIL-L-35078 - Loads, Unit: Preparation Of Semiperishable Subsistence Items; Clothing, Personal Equipment and Equipage, General Specification For

## STANDARDS

### MILITARY

- 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

(Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Standardization Documents Order Desk, BLDG 4D, 700 Robbins Avenue, Philadelphia, PA 19120-5094.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

## DRAWINGS

### U.S. ARMY NATICK RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER

- 2-1-1384 - Headband, Ground Troops' - Parachutists' Helmet
- 2-1-1385 - Clip, Spring, Headband

(Copies of drawings are available from the U.S. Army Natick Research, Development and Engineering Center, ATTN: STRNC-EMSS, Natick, MA 01760-5014.)

2.2 Non-Government publications. The following document forms 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. Guide 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 Materials and components. The materials and components used shall conform to the applicable referenced specifications, standards, and requirements specified herein. Where materials are not definitely specified, they shall be of the quality normally used for the purpose in commercial practice provided the completed items comply with all provisions of this specification. It is encouraged that recycled material be used when practical as long as it meets the requirements of this specification.

3.3.1 Identification marking. A white paper label with legible and durable black marking shall be placed inside the polyethylene bag specified in 5.1.1 so that the label can be read through the bag. The label paper shall be made of commercial quality white writing or printing paper, having a minimum basis weight of 20 pounds (17 x 22/500). The paper label shall contain the following information:

Item description (approximately 1/4 inch)  
Contract number (approximately 1/4 inch)  
Stock number (approximately 1/4 inch)  
Supplier's name (approximately 1/4 inch)

3.4 Design and construction. The design and construction of the headband shall be as specified herein, and as shown on Drawings 2-1-1384, 2-1-1385 and all subsidiary drawings and parts lists.

3.4.1 Stitching. All stitching shall be as specified on Drawing 2-1-1384 and herein.

3.4.2 Thread tension. 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 materials sewn. The lock shall be embedded in the materials shown.

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

a. When a thread break or bobbin run-out occurs during sewing, the stitching shall be repaired by restarting a minimum of 1/2 inch back of the end of the stitching. 1/

b. Any thread break or two or more consecutive skipped or runoff stitches noted during inspection of the item (in-process or end item) shall be repaired by over stitching. 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 stitching.

1/ When making the above repairs the ends of the stitching are not required to be back stitched.

3.4.4 Automatic stitching. Automatic stitching machines may be used to perform any of the required stitch patterns provided the requirements for the stitch pattern, stitches per inch, size and type of thread are met, and at least three or more tying, overlapping, or back stitches are used to secure the ends of the stitching.

3.4.5 Thread ends. All thread ends shall be trimmed to a length of not more than 1/4 inch.

3.4.6 Fusing of ends of nylon webbing. All ends of nylon webbing shall be fused as specified on Drawing 2-1-1384. The apparatus used to fuse the webbing ends shall be capable of providing sufficient heat to provide a smooth edge so that the cut ends of the webbing yarns are all fused together. Fusing of the webbing ends shall be accomplished prior to being assembled for stitching.

3.4.7 Repairs. Except as otherwise specified herein, repairs are not allowed to be made to the headband assembly.

3.4.8 Replacement of defective components. 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.

3.5 Workmanship. The headband shall conform to the quality of product established by this specification.

#### 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 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.

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.

4.1.3 Certificates 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 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.

4.4.1.1 Spring clip dimensional examination. The spring clip shall be examined for conformance to the dimensions specified on Drawing 2-1-1385. The lot size shall be expressed in units of spring clips. The sample size shall consist of the number of spring clips as indicated below for the applicable lot size. Any dimension on any spring clip in the sample not meeting the specified tolerances shall be cause for rejection of the lot.

<u>Lot size</u>	<u>Sample size (No. of spring clips)</u>
800 or less	2
801 to 22,000	3
22,001 and over	5

4.4.1.2 Component and material certification. A certificate of compliance may be acceptable as evidence that the materials used in fabricating the spring clip conform to the requirements specified on Drawing 2-1-1385.

4.4.2 In-process inspection. Inspection of subassemblies shall be made to ascertain that construction details which cannot be examined in the finished product are in accordance with specified requirements. The Government reserves the right to exclude from consideration the acceptance, any material or service for which in-process inspection has indicated nonconformance.

4.4.3 End item visual examination. The end items shall be examined for the defects listed in table I. The lot size shall be expressed in units of headbands. The sample unit shall be one headband. The inspection level shall be II. 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 I. End item visual defects

<u>Examine</u>	<u>Defect</u>	<u>Classification</u>	
		<u>Major</u>	<u>Minor</u>
Webbing	Any hole, cut, tear, or frayed edge	101	
	Not firmly or tightly woven; edge scalloped		201
	Any end not fused		202
Fastener tape	Any hole, cut, or tear	102	
Leather	Any hole, cut, or tear	103	
	Finish chipped, flaky, cracked, or omitted	104	

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

Examine	Defect	Classification	
		Major	Minor
Leather (cont'd)	Any imperfection that would cause discomfort to the wearer such as: hard area, scar tissue, or lumps	105	
	Grain surface of leather not facing outside	106	
	Deep scratch, crack, heavy vein, pit, or abraded area		203
Hardware	Broken or malformed, failing to serve intended purpose; finish omitted, corroded area, burr, or sharp edge	107	
	Buckle not attached in orientation specified in Drawing 2-1-1384	108	
	Any clip not attached as specified		204
Seams and stitching: Open seams	One half inch or less		205
	More than 1/2 inch	109	
	Note: A seam shall be classified as open when one or more stitches joining a seam are broken or when two or more consecutive skipped or runoff stitches occur.		
Runoffs	(See "Open seams")		
Seam and stitch type	Wrong seam or stitch type	110	
Stitch tension	Loose, resulting in loose bobbin or top thread		206
	Excessively tight, resulting in puckering of material or cutting of leather between needle holes		207
Stitches per inch	One stitch less than minimum specified		208
	Two or more stitches less than minimum specified	111	
	One or more stitches in excess of maximum specified		209



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

Examine	Defect	Classification	
		Major	Minor
Seams and stitching (cont'd)			
Stitching ends	Ends of stitching not secured as specified (except when caught in other stitching)		210
Thread breaks, skipped stitches or runoffs	Overstitched less than 1/2 inch in each direction beyond the defective stitching area		211
Note:	Thread breaks or two or more consecutive skipped or runoff stitches not overstitched shall be classified as open seams.		
Rows of stitching	Any row omitted	112	
Components and assembly	Any required component or operation omitted (unless otherwise classified herein)	113	
	Any component misplaced or not assembled as specified (unless otherwise classified herein)	114	
	Loop pile fastener tape not attached with loop pile facing the leather	115	
	Color of any component not as specified		212
	Needle chews	116	
	Any unauthorized repair	117	
Identification marking	Omitted, illegible, or incorrect		213
Cleanness	Spots or stains clearly noticeable		214
	Thread ends not trimmed throughout as specified		215

4.4.4 End item dimensional examination. The end items shall be examined for conformance to the dimensions specified on the drawings. Only those dimensions that can be evaluated without damaging or disassembling the end items shall be examined. Any dimension not within the specified tolerance shall be classified as a defect. The lot size shall be expressed in units of headbands. The sample unit shall be one headband. The inspection level shall be S-3. The AQL, expressed in terms of defects per hundred units, shall be 4.0.



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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. 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 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 headbands per shipping container is more or less than required

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. 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 requirement
Palletization	Pallet pattern not as specified Interlocking of loads 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.

5.1.1.1 Unit packing. Each headband shall be folded once at the approximate midpoint of the leather component and with the leather facing to the outside. The free end of the nylon webbing shall be folded under resulting in a assembly approximately 10 inches long. The folded headband along with the paper label specified in 3.3.1 (with the marking facing the outside of the bag) shall be inserted in a plastic bag conforming to A-A 50083.

5.1.1.2 Intermediate packing. Two hundred headbands, of one size only, unit packed as specified in 5.1.1.1, shall be packed on edge four in length, one in width, and five in depth in an intermediate fiberboard box conforming to style RSC, type CF (variety SW), class domestic, grade 200 of PPP-B-636. Approximate inside dimensions of each intermediate box shall be as specified in table II. Box closure shall be effected with 2-inch minimum width gummed paper tape conforming to type III, grade B of PPP-T-45.

TABLE II. Approximate inside dimensions of intermediate box and shipping container <sup>1/</sup>

Intermediate box (inches)	Shipping container (inches)
20 x 10-1/2 x 5	20-1/2 x 15-1/2 x 11

<sup>1/</sup> Approximate inside dimensions are furnished as a guide only

5.1.2 Commercial preservation. Headbands 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. Six hundred headbands of one size 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. Approximate inside dimensions of each shipping container shall be as specified in table II. 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 the container specification, except that the 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 non-metallic strapping, except for type II, class F loads.

5.2.2 Level B packing. Six hundred headbands of one size 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 275 of PPP-B-636. Approximate inside dimensions of each shipping container shall be as specified in table II. 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.

5.2.2.1 Weather-resistant fiberboard container. 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 the container specification, except that the inspection shall be in accordance with 4.4.5.

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

5.3 Palletization. When specified (see 6.2), headbands, packed as specified in 5.2.2 or 5.2.3, shall be palletized in accordance with load type Ia of 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 C and D or film bonding means F or G. Pallet pattern shall be number 102 in accordance with the appendix of MIL-STD-147.

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

## 6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but not mandatory.)

6.1 Intended use. The headband is intended to be used with the Ground Troops' - Parachutists' Helmet.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and data of this specification.
- b. 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 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. 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 documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Samples. 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.

Band  
Belt  
Cincture  
Ribbon  
Strip

6.6 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Army - GL  
Air Force - 99  
Navy - MC

Preparing activity:

Army - GL  
(Project 8470-0136)

Review activities:

Army - MD  
Air Force - 82  
DLA - CT

User activity:

Air Force - 45