

MIL-F-43832C
23 June 1986
SUPERSEDING
MIL-F-43832B
19 August 1980

MILITARY SPECIFICATION

FIELD PACK, COMBAT, NYLON, LARGE, LC-1

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

1. SCOPE

1.1 Scope. This document covers one type large size combat field pack fabricated from olive green nylon duck, webbings, tape, coated cloth and metallic hardware (see 6.1).

2. APPLICABLE DOCUMENTS

2.1 Government documents. Unless otherwise specified, the following documents of the issue in effect on the date of invitation for bids or request for proposal, form a part of this document to the extent specified herein:

SPECIFICATIONS

FEDERAL

A-A-203	-	Paper, Kraft, Untreated
V-T-285	-	Thread, Polyester
DDD-L-20	-	Label: For Clothing, Equipage, and Tentage (General Use)
PPP-B-636	-	Boxes, Shipping, Fiberboard

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 the document or by letter.

AMSC N/A

FSC 8465

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

MIL-F-43832C

MILITARY

MIL-B-543 - Buckles, Tongueless and Web Strap
 MIL-W-4088 - Webbing, Textile, Woven Nylon
 MIL-T-5038 - Tape, Textile and Webbing, Textile, Reinforcing,
 Nylon
 MIL-C-5040 - Cord, Nylon
 MIL-C-7219 - Cloth, Duck, Nylon
 MIL-F-10884 - Fasteners, Snap
 MIL-G-16491 - Grommet, Metallic
 MIL-E-20652/1- Eyelets, Metallic, Rolled Flange Type; and Eyelet
 Washer
 MIL-E-20652/3- Eyelets, Metallic, Telescopic Type
 MIL-F-21840 - Fastener Tapes, Hook and Pile, Synthetic
 MIL-W-27265 - Webbing, Textile, Woven Nylon, Impregnated
 MIL-L-35078 - Loads, Unit: Preparation of Semiperishable
 Subsistence Items; Clothing, Personal Equipment and
 Equipage; General Specifications For
 MIL-C-43375 - Cloth, Duck, Nylon, 12.5 Ounce
 MIL-W-43668 - Webbing, Textile, Bulked Nylon
 MIL-C-43906 - Cloth, Coated, Nylon, Polyurethane Double Coated

STANDARDS

FEDERAL

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-STD-147 - Palletized Unit Loads
 MS 27980 - Fastener, Snap, Style 2

DRAWINGS

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

2-2-336 - Field Pack, Combat, Nylon, Large, LC-1; Assembly Front
 and Side View
 2-2-337 - Field Pack, Combat, Nylon, Large, LC-1; Assembly Back
 and Bottom View
 2-2-338 - Field Pack, Combat, Nylon, Large, LC-1; Sections
 2-2-339 - Field Pack, Combat, Nylon, Large, LC-1; Pattern, Main
 Panel, and Details
 2-2-340 - Field Pack, Combat, Nylon, Large, LC-1; Patterns, Back
 Panel, Reinforced Upper and Lower, and Details
 2-2-341 - Field Pack, Combat, Nylon, Large, LC-1; Patterns,
 Center Pocket, Main Panel Reinforcement, Bottom and
 Details
 2-2-342 - Field Pack, Combat, Nylon, Large, LC-1; Patterns,
 Pouch Flaps, Radio and Ammunition Pockets, Ammunition
 Pocket Flap and Details

MIL-F-43832C

- 2-2-343 - Field Pack, Combat, Nylon, Large, LC-1; Patterns, Pocket Flaps, Side Pocket, Side Reinforced Pocket, Center Reinforced Pocket and Details
- 2-2-357 - Field Pack, Combat, Nylon, Medium and Large, LC-1; Frame Pocket Assembly and Details

(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 officer.)

2.2 Other publications. Unless otherwise specified, the following documents of the issue in effect on the date of invitation for bids or request for proposal, form a part of this document to the extent specified herein.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- D 1056 - Flexible Cellular Materials - Sponge or Expanded Rubber
- 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.)

(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 (except for associated detail specifications, specification sheets, or MS standards), 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 Samples.

3.1.1 Guide samples. Samples of the end item, when furnished, are solely for guidance and information to the contractor (see 6.3). Variations 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 6.7).

3.3 Materials and components. Materials (see 6.9) and components shall be as specified on the applicable drawings and as specified herein. For materials or components for which it is stated "or equal", if the contractor proposes to use an item considered to be equal to the material or component specified, prior to its use the contractor shall furnish a sample of the material or component, with supporting data to the contracting officer for subsequent evaluation by the responsible military agency.

MIL-F-43832C

3.3.1 Cloth, duck, nylon, 7.25 ounce. The nylon duck for all cloth components except the cover of the frame pocket shall be dyed Olive Green 106 and shall conform to type III, class 3 of MIL-C-7219 except the requirement for water resistance after dry cleaning shall not apply. The dimensional stability requirement shall be 3.5 max and the air permeability requirement shall be 4.0 max (see 6.8).

3.3.2 Cloth, duck, nylon 12.5 ounce. The nylon duck for the cover of the frame pocket pad shall be dyed Olive Green 106 and shall conform to class 2 of MIL-C-43375 except that only fair fastness to laundering shall be required. The dimensional stability requirement shall be 3.5 max and air permeability requirement shall be 4.0 max (see 6.8).

3.3.3 Cloth, coated, nylon, polyurethane double coated. The coated cloth for the pouch flap liner shall conform to MIL-C-43906 with the following exceptions:

- a. The overall weight shall be 5.5 to 6.4 ounces per square yard.
- b. The initial hydrostatic resistance and the hydrostatic resistance after abrasion, strength of coating and high humidity shall be 100 psi minimum.
- c. The hydrostatic resistance after accelerated weathering and the colorfastness after accelerated weathering shall not apply.
- d. The adhesion of coating shall be 6.0 pounds per 2 inch width (minimum).

3.3.4 Webbing, nylon.

3.3.4.1 3/4 inch and 2-1/4 inch widths. The 3/4 and 2-1/4 inch nylon webbing shall be dyed Olive Drab 7 and shall conform to types Ia and VIIIc, class 2 respectively of MIL-W-4088. The types Ia and VIIIc nylon webbing shall be resin impregnated conforming to class R treatment of MIL-W-27265.

3.3.4.2 1 inch width. The 1 inch nylon webbing shall be dyed Olive Drab 7 and shall conform to type III of MIL-W-43668.

3.3.5 Tape, nylon, 1 inch width. The 1 inch nylon tape shall be dyed Olive Drab 7 and shall conform to type III of MIL-T-5038.

3.3.6 Pad, foam. The foam pad shall be 1/2 inch thick conforming to ASTM D 1056, grade RE 41.

3.3.7 Cord, nylon, coreless. The cord for the pocket drawstring shall be Olive Drab 7 conforming to type IIa of MIL-C-5040.

3.3.8 Cord, nylon with core. The nylon cord for the pouch drawstring and adjusting cord shall be Olive Drab 7 and shall conform to type II of MIL-C-5040.

MIL-F-43832C

3.3.9 Thread, polyester. The thread shall be type I, class 1, sub-class B conforming to V-T-285. The thread size for all stitching, except binding, over- edging and bartacking, shall be size F. For prestitching, binding, overedging, and bartacking, the thread shall be size E. When 401 stitching is used for closing, size E thread shall be used as the looper thread. The thread shall be dyed Olive Drab S-1 (C.A. 66022) and shall show fastness to weathering equal to or better than the standard sample (see 6.3). When no standard sample is avail- able, the thread shall show "good" fastness to weathering.

3.3.10 Fastener tape, hook and pile, nylon. The nylon fastener tape shall be 1 inch wide, Olive Green 106 conforming to type II, class 1 of MIL-F-21840.

3.3.11 Eyelet, aluminum, black. The black enameled aluminum eyelet shall conform to dash No. ABE131 of MIL-E-20652/1.

3.3.12 Eyelets, brass, with washers. The brass eyelets and washers shall conform to dash numbers BBE117 and BBW101 respectively, of MIL-E-20652/1. An alternate brass telescopic eyelet with washer conforming to dash numbers BBT307 and BBT308 of MIL-E-20652/3 may be used.

3.3.13 Fasteners, snap. The snap fastener shall conform to style 2, finish 2 and part numbers MS 27980-1B, -6B, -7B and -8B of MIL-F-10884.

3.3.14 Grommets, metallic. The grommets shall be brass, black chemical finish conforming to type III, class 3, size No. 0 of MIL-G-16491.

3.3.15 Clamp, cord. The cord clamp shall consist of a lock body and lock wheel. The lock body shall conform to Fastex No. 238-390703-00-5612, color GN604, or equal, and the lock wheel shall conform to Fastex No. 238-082051-00- 0101, or equal (see 6.5).

3.3.16 Buckle, non-slip, w/spring, 1 inch. The buckle shall consist of a body and lever section made of corrosion-resistant steel, type 430, and a spring made of corrosion-resistant steel, type 301-302, and shall conform to Waterbury Buckle Co. No. 240, Prentice Corp. No. 3841 or equal (see 6.6). The buckle shall have a dull, black oxide finish (see 4.4.1.1).

3.3.17 Buckle, non-slip, steel. The 1 inch steel non-slip buckle shall conform to type V, class 3 of MIL-B-543.

3.4 Construction. The construction shall conform in all respects to the dra- wings listed in 2.1 and as specified herein.

3.4.1 Stitches, seams and stitching. All seams and stitchings, except bar- tacking, shall conform to FED-STD-751 as follows:

For all stitching except overedge stitching, binding and piecing

Stitch type 301 or 401,
8 to 10 stitches per inch.

MIL-F-43832C

For prestitching and stitching the binding	Stitch type 301, 8 to 10 stitches per inch.
For piecing stitching	Stitch type 301, 8 to 10 stitches per inch, seam type SSa-1, stitching margin 1/2 inch
For overedge stitching, 3/16 inch minimum gage	Stitch type 503, 504 or 602 8 to 12 stitches per inch

Edges of the main panel unit (with panel reinforcement), back panel unit (with upper and lower panel reinforcements), and bottom section (2 panels) shall be separately overedge stitched before closing seam is applied. The frame pocket panels shall be overedged separately as indicated on drawing.

3.4.1.1 Type 301 stitching. Ends of all stitching shall be backstitched or overstitched not less than 1 inch (1/2 inch for box, box-x, and W-W stitching) except where ends are caught in other seams or stitching. Thread tensions 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 imbedded 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-outs occur during stitching, except prestitching, the stitching shall be repaired by restarting the stitching a minimum of 1 inch (1/2 inch for box, box-x and W-W stitching) back of the end of the stitching. 1/

b. Except for prestitching, 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 1 inch in back of the defective area (1/2 inch on box, box-x and W-W stitching), continue over the defective area and continue a minimum of 1 inch (1/2 inch on box, box-x and W-W stitching) 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 401, 503, 504, and 602 stitching. Thread tension shall be maintained so that there will be no loose stitching. All repairs shall be in accordance with 3.4.1.1.1a and 3.4.1.1.1b except substitute 3/4 inch for 1 inch wherever 1 inch appears. Repairs to stitch type 401 may be accomplished by use of stitch type 301.

MIL-F-43832C

3.4.1.3 Bartacking. Unless otherwise specified, bartacks shall be as follows:

		<u>Tolerance</u>		
<u>Length</u>	<u>Width</u>	<u>Length</u>	<u>Width</u>	<u>Stitches per bartack</u>
1/2 inch	1/8 inch	+ 1/16 inch	+ 1/32 inch	28
3/4 inch	1/8 inch	+ 1/16 inch	+ 1/32 inch	42
1 inch	1/8 inch	+ 1/16 inch	+ 1/32 inch	42
2 inch	1/8 inch	+ 1/16 inch	+ 1/32 inch	80 to 84

Bartacking shall be free from thread breaks and loose stitching

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

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

3.4.1.6 Lubrication of thread. There shall be no lubrication of the thread by any means, prior to or during sewing (see 4.4.1.1).

3.4.2 Setting of eyelets. Holes shall be prepunched to receive the eyelets. Holes prepunched to receive the eyelets shall be smaller than the outside diameter of the eyelet barrel so that the barrel must be forced through the hole.

3.4.2.1 Eyelets, with washer, brass. The brass eyelets with washer shall be securely clinched in a manner that will prevent detachment from or cutting of the surrounding material. The eyelets shall be clinched without splitting.

3.4.2.2 Eyelets, aluminum. The aluminum eyelets specified in 3.3.11 shall be installed using score setting dies conforming to J. C. Rhodes part number 1-KW-1KL and 101Y-Klom, or Stimpson Co. Part Number A 2744-7 or equal (see 6.4). The eyelet shall be securely set in a manner that will prevent detachment from, or cutting of, the adjacent material. The clinched portion of the eyelet shall be on the inside of the assembly.

3.4.3 Setting of grommets. Holes shall be prepunched to receive the grommets. Holes prepunched to receive the grommets shall be smaller than the outside diameter of the grommet barrel so that the barrel must be forced through the hole. The grommet shall be securely clinched without cutting the adjacent material.

3.4.4 Setting of snap fasteners. A hole shall be prepunched to receive the button and eyelet components of the snap fasteners. The hole shall be smaller than the outside diameter of the button and eyelet barrels so that the barrel

MIL-F-43832C

must be forced through the hole. The hole shall not be punched in the setting operation with the button or eyelet barrel. The fasteners shall be securely clinched without cutting the adjacent materials and no more than three splits shall occur in the button or eyelet barrels.

3.4.5 Fusing of ends of nylon cord and webbing. All ends of nylon webbing and cord shall be fused. The apparatus used to fuse the webbing ends shall be capable of providing sufficient heat to provide a smooth edge and with the cut ends of the webbing yarns all fused together. Fusing of the webbing ends shall be accomplished prior to being assembled for stitching.

3.4.6 Location marks. Location marks shall not be drilled. Printed markings shall not be more than 1/32 inch in width.

3.4.7 Repairs. Repairs such as mends, darns, patches or splices are not permitted on the field pack.

3.4.8 Piecing. The nylon duck for the reinforcements of the main panel and for the reinforcements of the back panels may be pieced once only, either in the length or width direction (see 3.4.1). The pieced reinforcements shall be attached to the main or back panels so that the pieced seams are not exposed on the inside of the panel.

3.4.9 Replacement of defective components. During the spreading, cutting, and manufacturing process, components having material defects or damages that are classified as defects in Table I shall be removed from production and replaced with non-defective and properly matched components.

3.5 Markings. The identification marking shall be applied in the location shown on the drawing and shall conform to type IV, class 5 of DDD-L-20. Item description marking shall read FIELD PACK, COMBAT, NYLON, LARGE, LC-1. The letters "US" shall be applied in the location and in the size characters indicated on the drawing and shall conform to type IV, class 9 of DDD-L-20. Fastness of class 9 marking shall be as specified for class 5 marking. The instruction marking for hand washing the field pack shall be applied directly on the polyurethane coated cloth as shown on the drawing and shall conform to type IV, class 3 of DDD-L-20 and shall show colorfastness to laundering. The hand washing instruction shall be printed in letters 1/8 inch high. The contents of the hand washing instructions shall be as follows:

FIELD PACK, COMBAT, NYLON, LARGE LC-1

Hand Washing:

1. Scrape dirt/dust from item using a brush or flat stick which will not cut fabric/webbing.
2. Wash item in a pail of warm water using mild detergent or soap.

MIL-F-43832C

3. Rinse "thoroughly" in clean warm water.
4. DO NOT USE CHLORINE BLEACH, YELLOW SOAP, CLEANING FLUIDS OR SOLVENTS - WILL DISCOLOR/DETERIORATE THE ITEM.
5. Dry item in shade or indoors.
6. DO NOT DRY IN DIRECT SUNLIGHT, DIRECT HEAT OR OPEN FLAME.
7. DO NOT LAUNDRY OR DRY ITEM IN FIXED/COMMERCIAL/HOME-TYPE LAUNDRY EQUIPMENT.
8. DO NOT ATTEMPT TO DYE ITEM OR REPAIR IT. TURN IT IN FOR REPAIR/REPLACEMENT.

3.6 Patterns. Standard patterns for textile components other than tape or webbing are shown full scale on drawings and provide allowances for all seams and shall be used for making working patterns. The standard patterns shall not be altered in any way.

3.7 Workmanship. The field pack shall conform to the quality of product established by this document. Occurrence of defects shall not exceed the maximum acceptable 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 otherwise disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the 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 indicted or actual, nor does it commit the Government to acceptance of defective material.

MIL-F-43832C

4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for assuring 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 assure compliance with all dimensional requirements.

4.1.3 Certificate of compliance. When certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

4.2 Classification of inspection. 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 6.2), it shall be examined for the defects specified in 4.4.3, 4.4.4 and 4.4.5. 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 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.

4.4.1.1 Certification. The contractor shall furnish a certificate of compliance for the finish on the non-slip buckle specified in 3.3.16 and for the requirement of 3.4.1.6 prohibiting use of thread lubricants prior to or during sewing.

4.4.2 In-process inspection. Inspection shall be made at any point or during any phase of the manufacturing operation to determine whether cut lengths, cut parts, markings for location of components, and location of assembled component parts are in accordance with the specified requirements. In addition, inspection shall be made to determine that prepunched holes for receiving eyelets, grommets, and snap fasteners, are smaller than the outside diameter of the hardware barrel. 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.

MIL-F-43832C

<u>Examine</u>	<u>Material</u>	<u>Component</u>	<u>Drawing</u>
Cut length	Webbing, nylon, type Ia, 3/4 inch	Reinforcement, pocket	2-2-339
	Webbing, nylon, type III, 1 inch	Strap, pocket radio	2-2-342
		Strap, pocket	2-2-343
		Strap, securing	2-2-336
Cut parts	Cord, nylon, type II	Cord, adjusting	2-2-337
		Cord, drawstring, pouch	2-2-336
	Cord, polyester or nylon, 3/32 inch diameter	Cord, drawstring, pocket	2-2-336
Cut parts	Cloth, nylon, type III, class 3, 7.25 oz.	Panel, main	2-2-339
		Panel, back	2-2-340
		Panel, bottom	2-2-341
		Pockets, ammunition	2-2-342
		Pocket, radio	2-2-340
		Panels, pocket	2-2-343
		Flaps, pocket	2-2-343
	Cloth, nylon, class 2, 12.5 oz.	Cover "A" outface	2-2-357
		Cover "B" innerface	2-2-357
	Pad, foam	Pad, frame pocket	
	Cloth, coated, nylon	Flap, pouch liner	2-2-342

4.4.3 End item visual examination. The end item shall be examined for the defects listed in table I. The lot size shall be expressed in units of field packs. The sample unit shall be one completely fabricated field pack. 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 15.0 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>
Fabric	Hole, cut, tear, smash, broken or missing yarn, or open place clearly visible at normal in- spection distance (approximately 3 feet).	X	
	Shade bar or abrasion mark.		X

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Cloth, coated nylon polyurethane double coated	Defective or partially omitted coating of pouch flap lining material.		X
Webbing or tape	Any hole, cut, tear, or smash.	X	
	Not firmly and tightly woven, edges frayed or scalloped.	X	
	Multiple floats.		X
	Abrasion mark, slub, broken end or pick.	X	
	Cut ends of webbing not fused as specified.	X	
Hardware	Broken or malformed, failing to serve intended purpose, corroded area, burr or sharp edge.	X	
	Finish omitted or not as specified:		
	- on brass or aluminum components		X
	- on steel components.	X	
	Area of partial or no finish.		X
	Any required component improperly installed causing failure to serve intended purpose.	X	
Snap fasteners	Not assembled as specified.	X	
	Size or type not as specified.	X	
	Any fastener not functioning properly i.e., fails to snap closed, provide a secure closure or to open freely.	X	

NOTE: The fasteners shall be snapped and unsnapped twice to determine whether parts of fastener separate freely and also effect a secure closure.

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Snap fasteners (cont'd)	Clinched excessively tight, cutting adjacent material.	X	
	Clinched loosely, permitting any component to rotate freely but not to the degree that any component can be expected to become detached during use.		X
	Clinched loosely to the degree that components can be expected to become detached during use.	X	
	NOTE: Incomplete roll of end of button or eyelet barrel is evidence of improper and insecure clinching.		
	Incorrect style.	X	
	More than three splits in eyelet or button barrels.		X
Drawstring and cord	Cut, chafed or abraded. Ends not fused.	X	X
Pouch drawstring cord	Not threaded through grommets or knotted as specified. Omitted.	X	X
Clamp, cord	Reversed.		X
Adjusting tie cords	One cord omitted. Two or more cords omitted.	X	X
Side pocket drawstring	Not attached as specified.		X
Brass grommets and eyelets	Clinched excessively tight, cutting adjacent material.	X	
	Insecurely clinched to a degree that grommet or eyelet may be detached from material.	X	
	Washer installed on incorrect side of material. Eyelet barrel split.		X X

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Eyelets, aluminum	Insecurely clinched; clinched excessively tight, cutting fabric.	X	
	Not set with scored setting.	X	
	Installed with scored side on outside.		X
Open seam	1/2 inch or less.		X
	More than 1/2 inch.	X	
	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 run-off stitches occur. On double stitched seams, a seam shall be considered open when either one or both sides of the seam are open.		
Raw edge (on edge required to be finished)	More than 1/2 inch when securely caught in stitching.		X
	NOTE: Raw edge not securely caught in stitching shall be classified as an open seam.		
Run-off (see open seam)			
Seam and stitch type	Wrong seam or stitch type.	X	
Bartacks	Any bartack omitted.	X	
	Any bartack not as specified or not in specified location.		X
	Loose stitching, incomplete, or broken.		X
Stitch tension	Loose, resulting in loose bobbin or top thread.		X
	Excessively tight, resulting in puckering of material.		X

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Stitches per inch	Up to two stitches less than minimum specified.		X
	Three or more stitches less than minimum specified.	X	
	One or more stitches in excess of maximum specified.		X
	NOTE: Variation in the number of stitches per inch caused by the operator speeding up the machine and pulling the fabric in order to sew over heavy seams, or in turning corners shall be classified as follows:		
	(a) Within the minor defect classification - no defect.		
	(b) Within the major defect classification minor defect.		
Stitching ends	Not secured as specified.		X
Thread breaks, skipped stitches, or runoffs	Not overstitched as specified.		X
	NOTE: Thread breaks or two or more consecutive skipped or run-off stitches not overstitched shall be classified as open seams.		
Rows of stitching	Any row missing except on box, box-x, and W-W stitching.	X	
	On box, box-x, and W-W stitching: - one row of stitching omitted		X
	- two or more rows of stitching omitted.	X	

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Components and assembly	Any component part omitted or not as specified or any operation omitted or not as specified (unless otherwise classified herein).	X	
	Needle chews.	X	
	Any mend, darn, patch, splice or other unauthorized repair.	X	
	Any material pleated or caught in stitching where not specified.		X
Piecing	Any reinforcement of the main or back panels constructed of more than two parts.		X
Binding	Loosely applied but not exposing raw edge of material.		X
	Loosely applied exposing raw edge of material.	X	
	Ends of binding on pocket flap and on ammunition pockets not caught in seams.		X
Reinforcements	Missing or not located as specified.	X	
Darts (on pouch and large pocket flaps)	One or more omitted.		X
	Not formed and sewn separately on pouch flap pocket as specified.	X	
Pouch and large pocket bottoms	Single ply construction.	X	
	Stitching attaching sides of pocket pouch not sewn through reinforcements.	X	
Pockets and flaps	Pocket or flap not formed as specified.		X

MIL-F-43832C

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

Examine	Defect	Classification	
		Major	Minor
Pockets and flaps (cont'd)	Flaps improperly set or distorted failing to effect a full and smooth closure.	X	
Frame pocket	Edges of pocket not secured inside seams.	X	
Cleanness	Grease, oil, dirt or ink stains clearly noticeable.		X
	Thread ends not trimmed as specified.		X
Location markings	Drilled.	X	
	Printed marking more than 1/32 inch in width or not covered by component part.		X
Markings: US, identification and instructions	Omitted, incorrect, illegible, or misplaced, or size of characters not as specified.		X

4.4.4 End item dimensional examination. The end item shall be examined for the defects listed in Table II. The lot size shall be expressed in units of field packs. The sample unit shall be one field pack. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 6.5 for major defects and 15.0 for total (major and minor defects combined) defects.

TABLE II. End item dimensional examination

Examine	Defect	Classification	
		Major	Minor
Dimensions (overall)	Smaller than nominal dimensions less applicable minus tolerance indicated on drawings, but not smaller than nominal dimensions less twice the applicable minus tolerance.		X
	Smaller than nominal dimensions less twice the applicable minus tolerance.	X	
	Larger than nominal dimensions and applicable plus tolerance.		X

MIL-F-43832C

TABLE II. End item dimensional examination

Examine	Defect	Classification	
		Major	Minor
Component and location dimensions	Not within specified tolerance.		X
Stitch margin or gage	Not within specified tolerance.		X
Box, box-x and W-W stitching	Dimensions not as specified.		X
Brass eyelets	Not spaced on equipment hangers within specified dimensions.		X
Frame tie down strap	Not centered on pack by more than 1 inch.	X	
Securing straps	Not specified distance apart by more than 1/2 inch.	X	
Pockets and flaps	Not parallel to each other by more than 1/4 inch.		X
Frame pocket assembly	Out of horizontal or vertical alignment with back panel by 1/2 inch or more.	X	
Grommets	Set off center on hems by more than 1/4 inch.		X

4.4.5 Fit examination. The end item shall be examined for the defects listed below. The lot size shall be expressed in units of field packs. The sample unit shall be one field pack. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 0.65.

<u>Examine</u>	<u>Defect</u>
Fit of gauge in radio pocket (gauge is to simulate the size of AN/PRC25 or 77 radio)	Pocket too small, i.e., gauge fails to fit radio pocket. NOTE: Fit examination shall be performed with an 11 by 11 by 5-1/2 inch wooden gauge.

MIL-F-43832C

<u>Examine</u>	<u>Defect</u>
	The gauge shall be fully inserted in the radio pocket without effort other than that required to overcome friction between gauge and pocket.
Fit of frame in frame pocket	Pocket too small, i.e., top of frame fails to fit in padded frame pocket.
	NOTE: Fit examination shall be performed with Frame, Pack, Ground Troops, Lightweight, LC-1 (see 6.3). The following shall be performed to determine fit of frame in pocket:
	1. Position field pack with back facing upward.
	2. With back of frame toward field pack, insert top in pocket. The frame shall be fully inserted without effort other than that required to overcome friction between frame and pocket.

4.4.6 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	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 closure of container flaps, improper taping, loose strapping, or inadequate stapling. Bulged or distorted container.
Content	Number of field packs per shipping container is more or less than required.

4.4.7 Palletization examination. The fully packaged and palletized end item 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.

MIL-F-43832C

<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 load limits.
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.

5. PACKAGING

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

5.1.1 Level A packing. Fifteen field packs, laid out flat with all the outside flaps closed, shall be neatly packed (alternately reversed top to bottom) one on top of the other within a fiberboard shipping container conforming to style RSC-L, grade V2s of PPP-B-636. The inside of each fiberboard container shall be fitted with a box liner conforming to type CF, class weather-resistant, variety DW, grade V15c of PPP-B-636. Inside dimensions of each shipping container shall approximate 25-1/2 inches in length, 21 inches in width, and 18 inches in depth. Approximate dimensions are furnished as a guide only. 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 shipping container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced in accordance with the appendix of the container specification, except that the inspection shall be in accordance with 4.4.6. 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.

5.1.2 Level B packing. Fifteen field packs, laid out flat with all the outside flaps closed, shall be neatly packed (alternately reversed top to bottom) one on top of the other within a 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 fiberboard container shall be fitted with a box liner conforming to class domestic, variety DW, grade 275 of PPP-B-636. Inside dimensions of each shipping container shall approximate 25-1/2 inches in length, 21 inches in width, and 18 inches in depth. Approximate dimensions are furnished as a guide only. 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 shipping container shall be closed in accordance with method II as specified in the appendix of the container specification, except that the inspection shall be in accordance with 4.4.6.

MIL-F-43832C

5.1.2.1 Weather-resistant 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 the container specification, except that the inspection shall be in accordance with 4.4.6.

5.1.3 Commercial packing. Field packs, shall be packed in accordance with ASTM D 3951.

5.2 Palletization. When specified (see 6.2), field packs, packed as specified in 5.1.2 or 5.1.3, shall be palletized in accordance with load type Ia of MIL-STD-147. Pallet type shall be type 1 (4-way entry), type IV or type V in accordance with MIL-STD-147. 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 No. 6 shall be used in accordance with appendix of MIL-STD-147. Interlocking of loads shall be effected by reversing the pattern of each course.

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

6. NOTES

6.1 Intended use. The large field pack, consisting of a pouch with drawcord closure and three outer pockets, is designed to carry existence loads which include clothing, personal items and rations. Three smaller pockets are provided for carrying ammunition. Hangers are also provided for carrying individual equipment. The pouch has a separate pocket to accommodate the AN/PRC25 or 77 radios. The field pack is carried on the soldiers back by attaching to Frame, Pack, Ground Troops, Riveted, Lightweight, LC-1.

6.2 Ordering data. Acquisition documents should specify the following:

- a. Title, number and date of this document.
- b. When a first article is required (see 3.2, 4.3, and 6.7).
- c. Selection of the applicable level of packing (see 5.1).
- d. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.1.2.1).
- e. When palletization is required (see 5.2).
- f. Type and class of unit load required (see 5.1.1).

6.3 Samples. For access to samples, address the contracting activity issuing the invitation for bids.

6.4 Die, eyelet, score setting. Sources of supply for the score setting die specified in 3.4.2.2 are J.C. Rhodes and Company, Box 962, New Bedford, MA 02745 and Stimpson Co., Inc., Bayport, NY 11705.

MIL-F-43832C

6.5 Clamp, cord. A source of supply for clamp, cord, lock body and lock wheel specified in 3.3.15 is available from Fastex, Div. Illinois Tool, Inc., 195 Algonquin Road, Des Plaines, IL 60016.

6.6 Buckle, non-slip. Sources of supply for the 1 inch non-slip buckles, specified in 3.3.16 are Waterbury Buckle Company, Waterbury, CT 06720 or Prentice Corp., 34 Lexington Drive, Laconia, NH 03246.

6.7 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.

6.8 Edge fraying prevention of nylon cloth. Cut edges of nylon cloth specified in 3.3.1 and 3.3.2 are subject to fraying during the process of handling the cut parts during fabrication of the field pack. It has been found that fusing of the cut edges of the cloth will prevent fraying.

6.9 Recycled material. It is encouraged that recycled material be used when practical as long as it meets the requirements of the document (see 3.3).

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

6.11 International standardization agreement. Certain provisions of this document are the subject of international standardization agreement number STANAG 2311. When amendment, revision, or cancellation of this document is proposed which will effect of violate the international agreement concerned, the preparing activity will take appropriate reconciliation action through international standardization channels including departmental standardization offices, if required.

MIL-F-43832C

Custodians:

Army - GL
Navy - NU
Air Force - 99

Preparing activity:

Army - GL
Project No. 8465-0919

Review activities:

Army - MD
Air Force - 82
DLA - CT

User activities:

Navy - MC, YD
Air Force - 45

