INCH-POUND

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SUPERSEDING
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MILITARY SPECIFICATION

DRAWERS, COLD WEATHER, POLYPROPYLENE

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

1. SCOPE

1.1 Scope. This specification covers polypropylene drawers used as a component of the extended cold weather clothing system.

1.2 Classification. The drawers shall be of one type in the following sizes as specified (see 6.2).

Schedule of Sizes

X-Small
Small
Medium
Large
X-Large

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 8415

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

2. APPLICABLE DOCUMENTS

2.1 Government documents.

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 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-50083	-	Bag, Plastic, Folded Garment
DDD-L-20	-	Label: For Clothing, Equipage, and Tentage (General Use)
PPP-B-26	-	Bag, Plastic (General Purpose)
PPP-B-636	-	Boxes, Shipping, Fiberboard

MILITARY

MIL-L-35078	-	Loads, Unit: Preparation of Semiperishable Subsistence Items; Clothing, Personal Equipment, Equipage; General Specification For
MIL-T-43624	-	Thread, Polyester, Spun
MIL-C-44161	-	Cloth, Knitted, Terry, Polypropylene

STANDARDS

FEDERAL

FED-STD-191	-	Textile Test Methods
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
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 Naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

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 ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

Chromatic Transference Scale

Method 135 - Dimensional Changes in Automatic Home Laundering of Durable Press Woven or Knit Fabrics

(Application for copies should be addressed to the American Association of Textile Chemists and Colorists, Research Triangle Park, P.O. Box 12215, Durham, NC 27709.)

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.)

(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 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 First article. When specified, 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 Materials

3.3.1 Basic material. The basic material shall be a knitted multifilament 100 percent polypropylene terry-loop fabric conforming to MIL-C-44161 with the exception that infrared reflectance requirements shall not apply. The color shall be Brown 436.

3.3.2 Cuff material. The cloth for the cuffs shall be knit from a 140 denier (nominal) multifilament 100 percent polypropylene yarn. As an alternate, up to 10 percent nylon may be used with remaining percentage being polypropylene. The cloth shall conform to the following requirements when tested as specified in 4.4.1.1.

Knit	- 1 x 1 rib
Wales per inch, minimum	- 19
Courses per inch, minimum	- 32
Weight	- 5.3 oz/sq yd
Weight tolerance	- minus 0.5, plus 1.5 oz/sq yd

3.3.2.1 Color. The color shall be Brown 436 and shall be obtained by solution dyeing.

3.3.2.1.1 Matching. The color and appearance of the dyed cloth shall match the standard sample under daylight having a color temperature of 7000 ± 500K and shall be a good approximation to the standard sample under incandescent lamplight at 2850 ± 100K when tested as specified in 4.4.1.1.

3.3.2.1.2 Colorfastness. The dyed cloth shall show colorfastness to laundering (after 3 cycles), perspiration, and crocking equal to or better than the standard sample. When no standard sample is available, the dyed cloth shall show "fair" fastness to laundering (after 3 cycles), perspiration, and shall show an AATCC Chromatic Transference Scale rating for crocking not lower than 3.5.

3.3.2.1.3 Finish. The material shall be scoured with detergents to remove impurities and no materials having a tendency to cause latent tendering or yellowing of the cloth shall be used in any of the dyeing or finishing operations.

3.3.2.1.4 pH. The finished cloth shall have a pH value between 5.0 to 8.5 when tested as specified in 4.4.1.1.

3.3.2.1.5 Shrinkage. The knitted cloth for cuffs and waistband shall not shrink nor elongate more than 3.0 percent when tested as specified in 4.4.1.1.

3.3.3 Thread. The thread for seaming and stitching shall be ticket number 100, 2 ply conforming to MIL-T-43624. The ticket number shall be as specified in table II. The color shall be Brown 436 and shall show fastness to laundering (after 3 cycles) and perspiration equal to or better than the standard sample (see 6.4). When no standard sample is available, the dyed thread shall show good fastness to laundering (3 cycles) and perspiration.

3.3.4 Elastic webbing. The elastic webbing for making the waistband shall be a woven polyester webbing or a knitted polyester webbing conforming to the requirements listed below. The color of the polyester webbing shall be Brown 436 and shall meet the colorfastness requirements of MIL-C-44161.

Physical requirements for waistbands

Characteristic	Knitted polyester webbing requirements
Construction	Knit on a 14 gauge machine having a needle width of 20. Three mock sewing channels are to be formed at the bottom of the band by having the 2nd, 4th and 6th needles from the bottom edge be free from any yarns or elastic yarns.
Width, inch	1-1/4 plus or minus 1/16
Weight, oz/lin yd	0.55 (min)
Elastic ends	17 (min)
Elastic gage	36 (max)
Picks per inch	40 (min)
Warp ends	17 (min)
Yarn size:	
Warp	1 end 1/150/34 polyester
Filling	10 ends 1/150/34 polyester
Tension, lbs.	
Initial	1.70 plus or minus 0.25
After acc. aging	80% of initial value (min)
Width, inch	1-5/16 plus or minus 1/16
Weight, oz/lin yd	0.62 (min)
Elastic ends	14 (min)
Elastic gage	36 (max)
Filling yarns/inch	60 (min)

Characteristic	Woven polyester webbing requirements
Tension, lbs.	
Initial	1.9 plus or minus 0.3
After acc. aging	1.6 plus or minus 0.5
Yarn size	
Warp	20/2
Filling	1/300/60

3.4 Label. Each pair of drawers shall have a class 4 combination identification/size label and a class 3 instruction label conforming to type VI, of DDD-L-20. The label shall show colorfastness to laundering. The instruction label legend shall contain the following information:

DRAWERS, COLD WEATHER, POLYPROPYLENE

FIXED LAUNDRY: The polypropylene drawers should be laundered utilizing "Natick Formula IV". NOTE: DO NOT STARCH, BLEACH OR PRESS.

FIELD LAUNDRY: The polypropylene drawers should be laundered utilizing "Formula II" of TM 10-280. NOTE: DO NOT STARCH, BLEACH OR PRESS.

DRYING: The polypropylene drawers should be finished in a tumble-dryer, loaded not more than 2/3 of rated capacity at low heat cycle (do not exceed 100°F). Remove immediately from dryer. Avoid over-drying.

MACHINE/HAND LAUNDERING: Use delicate wash cycle or wash by hand in cold water (85°F) and cold water detergent. Rinse in clean cold water. DO NOT BLEACH OR STARCH.

DRYING (HOME): Tumble dry permanent press cycle (100°F) for 30 minutes. Remove immediately. DO NOT OVER-DRY. DO NOT PRESS.

3.5 Design. The drawers shall be ankle length with elastic waistband.

3.6 Patterns. Standard patterns which show size, directional lines, placement marks, notches for assembly, and 1/4 inch seam allownace unless otherwise specified, will be furnished by the Government. The Government patterns shall not be altered in any way and shall be used as a guide for cutting the working patterns.

3.6.1 Pattern parts. The component parts of the drawers shall be cut from the materials specified below and in accordance with the pattern parts indicated.

List of pattern parts

Material	Pattern nomenclature	Cut parts
Cloth, knitted terry polypropylene	Leg	2
	Fly	2
Polypropylene	Cuff	2
Elastic webbing	Waistband	1

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

3.7.1 Stitches, seams, and stitchings. Stitches, seams, and stitching types specified in table II shall conform to FED-STD-751. Whenever two or more methods, seams, or stitches are given for the same part of an operation, any one of them may be used. Ends of all stitching when not caught in other seams or stitching shall be backstitched not less than 1/2 inch. Thread tension shall be maintained so there will be no loose stitching resulting in a loose bottom or top thread or no excessively tight stitching resulting in puckering of the materials sewn. The minimum and maximum number stitches per inch shall be as specified in table I.

3.7.2 Repairs of stitching. Repairs of stitching shall be as follows:

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

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 1/2 inch back of the defective area, continue over the defective area, and continue a minimum of 1/2 inch beyond the defective area onto the existing stitching. Loose or tight stitching shall be repaired by removing the defective stitching without damaging the material and restitching in the required manner. 1/

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

3.8 Manufacturing operations requirements. The drawers shall be manufactured in accordance with the operation requirements specified in table I. The contractor is not required to follow the exact sequence of operations.

TABLE I
MANUFACTURING OPERATIONS REQUIREMENTS

NO.		STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
1.	Cut drawers. The drawers shall be cut in accordance with the patterns. All component parts shall be cut lengthwise in the direction of the wales.						
2.	Marking. a. Mark, ticket or bundle all cut parts to insure a uniform shade, color and size throughout the drawers. b. Any method of marking may be used except: (1) Metal fastening devices. (2) Sew-on tickets. (3) Adhesive type tickets which leave traces of adhesive on the material after removal of the tickets.						
3.	Make fly panel.						
	a. With right sides together, join right fly piece to right front, and left fly piece to left front, as indicated by marks on pattern.	503 or 504	SSa-1	12-16	100	100	
	b. Fold back left fly piece and topstitch as indicated by marks on pattern.	301	SSe-2	10-12	100	100	
	c. Join all four plies of fronts and fly pieces from waist to notch and below fly opening.	503 or 504	SSa-1	12-16	100	100	

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

TABLE I (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
3.	Make fly panel. (cont'd)						
	d. Overedge raw edge of right fly piece.	503 or 504	SSa-1	12-16	100	100	
	e. With right sides together, join edges of both fly pieces, leaving a 6 3/4 ± 1/4 inch opening, and making sure to overedge completely raw edge of left fly piece.	503 or 504	SSa-1	12-16	100	100	
4.	Join front and back seams and attach instruction label.						
	a. With right sides together, join remainder of front seam.	503 or 504	SSa-1	12-16	100	100	
	b. Fold instruction label in half evenly crosswise. With right sides together join back seam, catching both ends of label in stitching 6 ± 1/4 inches below waist edge.	503 or 504	SSa-1	12-16	100	100	
5.	Join front and back.						
	With right sides together join front and back with one continuous seam.	503 or 504	SSa-1	12-16	100	100	
6.	Make ankle cuffs.						
	With right sides together seam cuffs. Turn to right side, folding cuff in half.	503 or 504	SSa-1	12-16	100	100	

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NO.	TABLE I (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
7	Attach ankle cuffs to legs.						
	Seam folded cuffs to legs. The wales of the finished cuffs shall run in the same direction as the leg wales. The seams of cuffs and legs shall match ± 1/8 inch.	503 or 504	SSa-1	12-16	100	100	
8	Make waistband and attach identification size label.						
	a. Close elastic waistband. The ends of the waistband shall be joined at the center back of the body overlapping each end of the webbing 1/8 to 1/4 inch and securely stitched. The stitch chain shall be left 3/8 to 3/4 inch long and turned under and securely stitched by label stitching (oper. 8d). The stitch gage shall be 3/16 to 1/4 inch.	304 or	LSa-1	28-32	30-2	30-2	
		605 or	LSa-1	12-16	70-3	30-2	30-3
		606 or	LSa-1	12-16	100	100	100
		607	LSa-1	12-16	100	100	100
	b. The ends of the waistband shall be butted with a 6/16 to 1/4 inch stitch gage. The stitch chain shall be left 3/8 to 3/4 inch long and turned under and securely stitched by label stitching (oper. 8d).	304 or	FSa-1	28-32	100	100	
		605 or	FSa-1	12-16	100	100	100
		606 or	FSa-1	12-16	100	100	100
		607	FSa-1	12-16	100	100	100
	c. Attach waistband elastic to waist. The one piece waistband shall be attached to the top of the body of the drawers.	407 or	LSa-1	12-16	100	100	100
		605	LSa-1	12-16	100	100	100
	d. Attach identification size label on the inside center of back elastic just below the top edge of the waistband of the drawers. The label shall be attached to the elastic webbing by securely stitching all sides at 1/16 to 1/8 inch from edges of label	301	10-14		100	100	

TABLE I (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
9.	Bartacking. Bartack at top and bottom of fly perpendicular to crotch joining seam. Bartacks shall measure 3/8 to 1/2 inch long and shall not extend beyond front edge. The opening shall finish 5 1/8 ± 1/4 inch long.						
10.	Clean drawers. Trim raw edges, ends of thread and stitching, inside and outside the drawers. Remove all spots and stains.						

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3.9 Finished measurements. The finished measurements shall be as shown in table II.

TABLE II. Finished measurement (inches)

	XS	S	M	L	XL	Tolerance (inches)
One half 1/ waist	11-1/4	12-1/4	13-1/4	14-1/4	15-1/4	+3/4, -1/2
Inseam 2/	28-1/4	29-1/4	30-1/4	31-1/4	32-1/4	±3/4
One half cuff width 3/	3-1/4	3-1/4	3-3/4	3-3/4	4-1/4	+3/4, -1/2
Cuff length 4/	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	+3/4, -1/2

1/ Measure along center of waistband from folded edge to folded edge.

2/ Measure inseam of drawers from crotch seam to bottom edge of drawers leg cuff.

3/ Measure width of cuff from folded edge to folded edge at center of cuff.

4/ Measure length of cuff from seam edge of ribbing to bottom edge of hem.

NOTE: All measurements shall be taken with the drawers laid out flat with no smoothing of the fabric and under no tension.

3.10 Workmanship. The finished drawers shall conform to the quality of product established by this specification. The occurrence of defects shall not exceed the applicable acceptable quality levels.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (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 the 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.

4.2 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. When a first article is required (see 3.1 and 6.2), it shall be examined for the visual defects specified in table IV and the dimensional requirements specified in table II.

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 requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.4.1.1 Component testing. In addition, testing shall be performed on components listed in table III for characteristics noted. The methods of testing specified in FED-STD-191 wherever applicable and as listed in table IV shall be followed. All requirements are applicable to the sample unit. All test reports shall contain the individual values used in expressing the final result. The sample unit shall be 3 yards full width of the 1 x 1 rib cloth. The component lot shall be unacceptable if one or more sample units fail to meet any of the test requirements specified. The lot size and sample size shall be in accordance with the following:

Lot size (yards)	Sample size (sample units)
800 or less	2
801 to 22,000 inclusive	3
22,001 and over	5

TABLE III. Component tests

Component	Characteristic	Requirements paragraph	Test method
1 x 1 rib polypropylene cloth	Material identification	3.3.2	1/
	Weight	3.3.2	5041
	Wales and courses	3.3.2	5070
	Colorfastness to		
	Laundering (after 3 cycles)	3.3.2.1.2	5610
	Crocking	3.3.2.1.2	5651
	Perspiration	3.3.2.1.2	5680
	pH	3.3.2.1.4	2811
	Dimensional stability	3.3.2.1.5	2/
Elastic webbing	Characteristics requirements	3.3.4	1/

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

2/ AATCC Method 135, Dimensional Changes in Automatic Home Laundering of Durable Press Woven or Knit Fabrics - Machine Wash Condition II (120° ± 50°F) Drying Procedure B (Tumble) except that the drying temperature shall not exceed 120°F.

4.4.2 End item visual examination. The end items shall be examined for the defects listed in table IV. The lot size shall be expressed in units of one pair of drawers. The sample unit shall be one pair of drawers. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 6.5 for total (major and minor combined) defects.

TABLE IV. End item visual defects

Examine	Defect	Classification Major	Minor
Material defects	Any hole, cut, tear, drop stitch, thin place, or mend.	101	
	Slubby yarn (more than twice the size of normal yarn diameter).		201
	Drop ply.	102	
	Tiger stripes, loose knitting, causing sleasiness.		202
	Burrs.	103	
	Uneven, ridgy, or cockled fabric.		203
	Barre		204

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

Examine	Defect	Classification Major	Minor
Color and shade	Wrong color.	104	
	Color or shade not comparable to standard sample.		205
	Shaded parts clearly visible. 1/		206
	Streaks clearly visible. 1/		207
Cleanness	Any spots and stains.		208
	Rancid, bad odor.	105	
Seam and stitchings	Any seam twisted, puckered, or pulled.		209
	Needle chew.	106	
	Loose or tight tension resulting in an unsatisfactory seam.	107 108	
	End of stitching not caught in other seam or stitching, not backstitched or backstitched less than 1/2 inch.		210
	Any part of drawers badly pleated, caught or twisted in any unrelated row of stitching.	109	
	Two or more untrimmed ends more than 1 inch in length.		211
	Repair of open seam not as specified.		212
Seam type	Wrong seam type.	110	
Stitch type	Wrong stitch type.	111	
Stitches per inch	Number of stitches per inch exceeding minimum or maximum specified.		213
Open seams (any broken stitch or two or more continuous skipped stitches)	Up to 1/4 inch inclusive.		214
	More than 1/4 inch.	112	
Raw edge	Any raw edge protruding more than 1/4 inch or protruding more than 1/8 inch along 1/2 inch or more of seam.		215

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

Examine	Defect	Classification Major	Minor
Garment construction	Any operation omitted or other than specified.	113	
Components	Any component part missing, improperly inserted, or other than specified.	114	
Bartack	Missing or not as specified.	115	
Labeling or markings	Missing, misplaced, incorrect, illegible, or not properly stitched.		216

1/ At normal inspection distance (approximately 3 feet).

4.4.3 End item dimensional examination. The end items shall be examined for conformance to dimensions specified in table II. Any dimension deviating from the specified requirement and tolerance, and legs uneven in length by 1/2 inch or more shall be classified as defects. The lot size shall be expressed in units of one pair of drawers. The sample unit shall be one pair of drawers. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

4.4.4 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 e 2.5.

Examine	Defect
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 closure of container flaps, loose strapping, inadequate stapling, improper taping. Bulged or distorted container.

Examine	Defect
Content	Number of drawers per container is more or less than required. 1/

1/ For this defect, one shipping container in the sample shall be examined.

4.4.5 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.

Examine	Defects
Finished dimension	Length, width, or height exceeds specified maximum requirement.
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 Preservation. Preservation shall be level A or Commercial (see 6.2).

5.1.1 Level A. Each pair of drawers shall be folded to the maximum dimensions of 15 inches by 11 inches with the waistband on top and at one end, then placed in a close-fitting clear polyethylene bag conforming to A-A-5003 or type I or II, style 1 of PPP-B-26. The bag shall have a 1/4 inch hole located near a bottom corner to allow air to escape.

5.1.2 Commercial. Drawers 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. Twenty drawers of one size only, preserved as specified in 5.1, shall be packed within a snug-fitting fiberboard shipping container conforming to style FOL-L, class weather-resistant, grade V2s of PPP-B-636. The shipping container shall be fitted with a box liner conforming to class weather-resistant, variety DW, grade V15c of PPP-B-636. Level A unit packs shall be packed flat, 2 in length, 1 in width, and 10 in depth. Approximate dimensions

of the container are 22 inches in length, 15 inches in width, and 12 inches in depth. Dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.4. Shipping containers shall be arranged in unit loads in accordance with MIL-L-35078 for type and class of unit 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. Twenty drawers of one size only, preserved as specified in 5.1, shall be packed within a snug-fitting fiberboard shipping container conforming to style FOL-L, class domestic, grade 275, variety SW of PPP-B-636. The shipping container shall be fitted with a box liner conforming to class domestic, variety DW, grade 275 of PPP-B-636. Level A unit packs shall be packed flat, 2 in length, 1 in width and 10 in depth. Approximate dimensions of the container are 22 inches in length, 15 inches in width, and 12 inches in depth. Dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.4.

5.2.2.1 Weather-resistant fiberboard container. When specified (see 6.2), the shipping container shall be a grade V3c, V3s, or V4s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.4.

5.2.3 Commercial packing. Drawers of one size only, preserved as specified in 5.1, shall be packed in accordance with ASTM D 3951.

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

5.4 Marking. In addition to any special marking required by the contract 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.

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

Stock Number
Nomenclature
Size
Quantity

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 drawers are intended for wear as part of the extended cold weather clothing system.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of this specification.
b. Size (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 sample is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for inspection and approval of the first article.

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

6.5 Subject term (key word) listing.

ECWCS

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
Navy - NU

Preparing activity:
Army - GL

(Project 8415-0632)

Review activities:
Army - MD
Navy - MC
DLA - CT

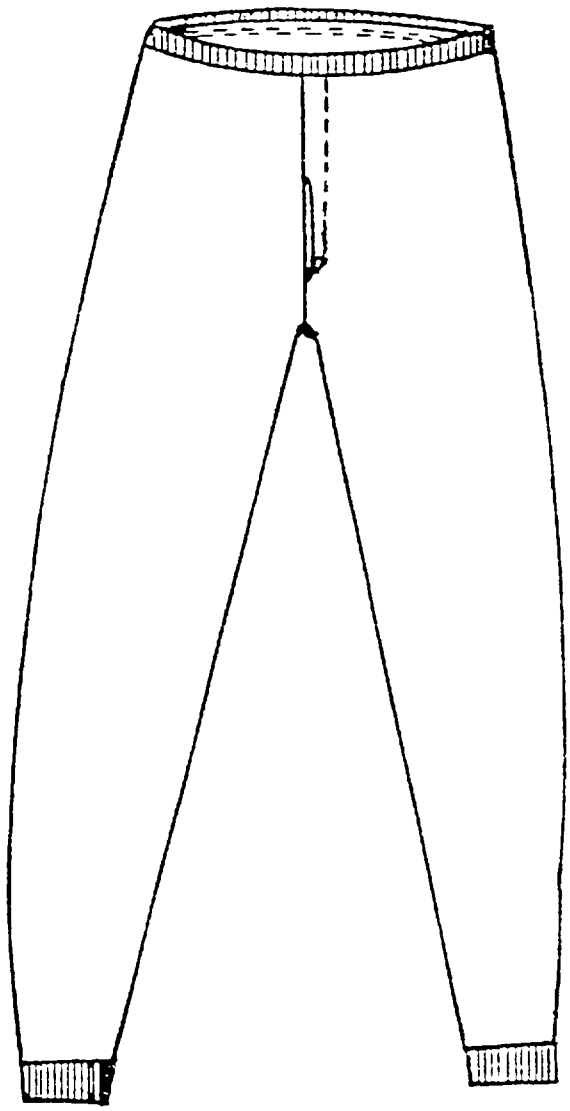

FIG. 1 - DRAWERS, COLD WEATHER, POLYPROPYLENE

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE
MIL-D-44165A	Drawers, Cold Weather, Polypropylene

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ USER
	☐ MANUFACTURER
	☐ OTHER *(Specify)*: _____

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optional	b. WORK TELEPHONE NUMBER *(Include Area Code)* – Optional
c. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional	8. DATE OF SUBMISSION *(YYMMDD)*

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NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document*(s)* or to amend contractual requirements.

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