5 March 1986

SUPERSEDING MIL-J-82281B(SA) 9 September 1977

MILITARY SPECIFICATION

JERSEY, FLIGHT DECK CREWMAN'S

This specification is approved for use by the Navy Clothing and Textile Research Facility, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 <u>Scope</u>. This specification covers the requirements for a long sleeve, pullover type, cotton jersey.

1.2 <u>Classification</u>. The jerseys shall be of one type only, in the following sizes and colors (see 6.2):

Sizes

Small	(34-36)
Medium	(38-40)
Large	(42-44)
Extra Large	(46-48)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Officer in Charge, Navy Clothing and Textile Research Facility, 21 Strathmore Road, Natick, MA 01760-2490 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

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Colors

White (Unbleached) Blue - 3355 Green - 3432 Yellow - 3512 Brown - 3728 Red - 3804 Purple - 3905

2. APPLICABLE DOCUMENTS

* 2.1 Government documents.

2.1.1 <u>Specifications</u>, standards, and handbooks. Unless otherwise specified, the following specifications, standards, and handbooks of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified.

SPECIFICATION

FEDERAL

V-T-276	- Thread, Cot	ton			
NN-P-71	- Pallet,	Material	Handling,	Wood,	Stringer
	Construct	ion, 2 Way	and 4 Way		
DDD-L-20	- Label; For	Clothing,	Equipage and	Tentage	(General
	Use)				

MILITARY

MIL-P-15011	- Pallet, Material Handling, Wood, Post Construction,
	4 Way Entry
MIL-B-17757	- Boxes, Shipping, Fiberboard (Modular Sizes)

STANDARDS

FEDERAL

FED-STD-191	-	Textile Te	est Metl	abor	
FED-STD-751	-	Stitches,	Seams,	anđ	Stitchings

MILITARY

MIL-STD-105	- Sampling Procedures and Tables for Inspection	n by
	Attributes	
MIL-STD-129	 Marking for Shipment and Storage 	
MIL-STD-147	- Palletized Unit Load	
MIL-STD-1491	- Glossary of Knitting Imperfections	

(Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein.

US POSTAL SERVICE MANUAL

(Copies of the manual may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402).

* 2.2 Other publications. The following document(s) form a part of this specification to the extent specified herein. The issues of documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and supplement thereto, if applicable.

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Association, ATTN: Traffic Department, 1616 P Street, N.W., Washington, DC 20036).

UNIFORM CLASSIFICATION COMMITTEE, AGENT

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, Illinois 60606).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1059-76 YARN NUMBER BASED ON SHORT-LENGTH SPECIMENS

(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, the text of this document shall take precedence.

3. REQUIREMENTS

3.1 <u>Guide sample</u>. Samples, when furnished, are solely for guidance and information to the contractor (see 6.3). Variations from this specification may appear in the sample in which case this specification shall govern.

3.2 <u>First article</u>. When specified, the contractor shall furnish sample unit(s) for first article inspection and approval (see 4.3 and 6.2).

3.3 Material.

3.3.1 <u>Cloth, cotton, rib knit</u>. The cloth used for all knitted parts of the jersey shall be a 1 by 1 circular rib, knitted from 18/1 (+ 1) cotton yarns, when tested as specified in 4.4.1.

3.3.1.1 <u>Physical requirements</u>. The finished cloth shall conform to the physical requirements specified in Table I, when tested as specified in 4.4.1.

Weight oz/sq yd (g/sq m)	Wales Per Inch (per 2.5 cm) (min)	Courses Per Inch (per 2.5 cm) (min)	Bursting Strength lbs (Newtons) (min)
8.0 ± 1.0 (271.2 \pm 34)	20	35	90 (400.5)

Table I - Physical Requirements

* 3.3.1.2 <u>Pre-shrinkage treatment</u>. The knitted cloth shall be pre-shrunk by a mechanical shrinkage process before being cut into garments. The use of resin or other non-fibrous materials to reduce shrinkage is prohibited. The cloth shall show no more than 2.0 percent starch and protein content when tested as specified in 4.4.1. The preshrinkage process used shall not be identified by name or trademark on the finished garment or package (see 3.9).

3.3.1.3 <u>Color</u>. The color of the finished cloth shall be as specified (see 6.2) and shall match the standard samples.

* 3.3.1.4 <u>Dyestuff</u>. Any suitable dyestuff, except sulfur, that will meet the shade and colorfastness requirements specified herein will be acceptable. When tested as specified in 4.4.1, there shall be no more than a slight trace of sulfur.

3.3.1.5 <u>Colorfastness</u>. The colorfastness properties of each unit of product tested as specified in 4.4.1 shall have a total "Weighted Value" of not less than 85. The weighted value of each characteristic shall be derived by multiplying the ranking value by the resulting fastness rating as assigned in Table II.

Colorfastness			Fastness Rating	{
Characteristics	Ranking	Good = 5	Fair = 3	Poor = 0
Laundering	5	25	15	0
Perspiration	5	25	15	0
Dry Crocking	4	20	12	0
Wet Crocking	3	15	9	0
Light	2	10	6	0

Table II - Weighted Values for Colorfastness Properties

3.3.1.6 <u>Matching</u>. The finished cloth shall match the standard sample under artificial daylight having a color temperature of 7000 ± 500 Kelvin and shall be a good approximation to the standard sample under incandescent lamplight at 2850 + 100 Kelvin.

3.3.2 Thread. The thread for seaming and stitching shall be cotton, ticket numbers 40 and 50, 3 ply, type IA3 (for colored jerseys) and type IA1 or IA2 (for white jerseys), conforming to V-T-276. The threads shall be dyed to match the shade of the basic cloth, except that bleached or unbleached may be used on the white jerseys. Dyed thread shall show fastness to light, laundering, and perspiration equal to or better than the standard sample. When no standard sample is available, the dyed thread shall show a minimum of "good" fastness to light, laundering, and perspiration.

3.3.3 <u>Binding</u>. The binding for reinforcing the back of the collarette and the shoulders shall be basic material as specified in 3.3.1. The binding shall be cut in 3/4 inch wide strips, along the wales.

3.3.4 <u>Combination label</u>. Each jersey shall have a combination size, identification and instruction label conforming to type VI, class 14 of DDD-L-20. The fastness to laundering requirements shall apply. The label shall bear the following inscription:

Jersey, Flight Deck Crewman's Fiber Content: Cotton (100%) Contract No: DLA-100-00-0-0000 (Example) Size: Medium (38-40) (Example) Stock No.: 8415-00-000-0000 Name of Contractor:

Machine Wash - Hot Water - NO BLEACH Tumble Dry or Use NAVEDTRA 414-01-45-81, Formula II

3.4 <u>Design</u>. The jersey shall be a pullover type, with a turtle neck collarette, and long sleeves having double thickness wristlets made from tubular or flat knit material. The collarette shall also be double thickness made from tubular or flat knit material. The body shall be either a one or two piece construction, with the latter having side seams (see Figure 1).

3.4.1 <u>Figure</u>. Figure 1 is furnished for information purposes only. To the extent of any inconsistencies between the written specification and the figure, the written specification shall control.

3.5 Patterns. Standard patterns to be used to cut working patterns will be furnished by the Government (see 6.3). The patterns allow 5/16 inch seam allowance for all seams, except as otherwise indicated in Table III. The working patterns shall be identical to the Government patterns. Neither the Government patterns nor the working patterns shall be altered in any way.

3.5.1 <u>Pattern parts</u>. The component parts for the jerseys shall be cut from the material as specified, and in accordance with the pattern parts required for the manufacturing process as follows:

Material	Pattern Parts	Cut Parts
Cloth, cotton, rib knit	Back Front	1
	Collarette	$\frac{1}{2}\frac{1}{1}$
	Wristlet Sleeve	$\frac{2}{2}$ $\frac{1}{2}$

1/ Patterns furnished are for construction with tubular material only. For construction with flat knit material, patterns shall be modified to allow for seam allowance.

3.6 Construction.

* 3.6.1 <u>Stitches, seams and stitchings</u>. Stitch, seam, and stitching types specified in Table III shall conform to FED-STD-751. Whenever two or more methods for seams or stitchings are given for the same part of the operation, any one of them may be used. Seam allowances shall be maintained with seams properly sewn so that no raw edges, runoffs, twists, pleats, puckers, or open seams result. The bite of the overedge stitching shall be 3/16 to 1/4 inch. Operations specifying stitch type 515, 516, or 519 may be performed separately, using stitch type 301 or 401 and 503, 504 or 602.

3.6.2 Thread breaks and ends of seams. Ends of all seams and stitchings when not caught in other seams or stitchings shall be backtacked not less than 1/4 inch. The ends of a continuous line of stitching shall be overlapped not less than 1/2 inch. Thread breaks (all stitch types) shall be secured by stitching back of the break not less than 1/2 inch. Skipped stitches or thread breaks on 401 stitch type may be repaired by using 301 stitch type. When ends of overedge stitching are not caught in other seams or stitching, the ends will be tacked.

3.6.3 <u>Stitches per inch</u>. The minimum and maximum number of stitches per inch shall be as specified in Table III.

3.7 <u>Manufacturing operations requirements</u>. The jersey shall be manufactured in accordance with operation requirements specified in Table III. The contractor is not required to follow the exact sequence of operations listed provided that the finished jersey is identical to that produced by following the sequence of operations as listed in Table III.

3.7.1 <u>Abbreviations in table of operations</u>. The abbreviations used in table III are as follows:

Stch		Stitch
in	-	inch
Nd1	-	Needle
ВоЪ	-	Bobbin
Lpr	-	Looper

TABLE III - CONSTRUCTION OF JERSEYS

					THREAD
NO.	OPERATION	STCH	SEAM/	STCH	NDL BOB/
		TYPE	STCH TYPE	IN	LPR

<u>Cutting</u> a. All parts of the jersey shall be cut in strict accordance with patterns furnished which show size, shape, directional lines, and marks for proper assembly.

b. As an alternative, the jersey body may be constructed from a tubular knit material, however, pattern seam allowances must be eliminated. Garment dimensions must conform to the finished measurements (see 3.8).

c. All component pattern parts shall be cut from one piece of material except the binding which may be cut from ends. Parts cut from ends shall approximate the shade of the jersey on which it is used.

2. Replacement of defective components

During the spreading, cutting, and manufacturing process, components having material defects or damages that are classified as defects in Section 4 shall be removed from production and replaced with non-defective and properly matched components.

3. Shade and size markings

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a. All parts shall be marked, ticketed, or bundled to insure a uniform shade, size and proper assembly throughout the jersey.

b. The use of corrosive metal fastening devices or sewn-on tickets shall be prohibited.

c. The use of ink pad numbering machine, rubber stamp, or pencil will be acceptable provided the numbers do not show through the outside of the garment and the numbers are covered by the seam allowance whenever possible.

TABLE III - CONSTRUCTION OF JERSEYS

					THREAD
10.	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH IN	NDL BOB/ LPR
•	Shoulder and collarette a. Stitch right and left shoulder seams.	503 or 504	SSa-1	10-12	40 40 or 50 50
	b. When a flat knit material is used, fold collarette end to end and stitch with wales parallel to seam.	503 or 504	SSa-1	10-12	40 40 or 50 50
	c. Fold collarette in half lengthwise with stitching inside and stitch to neckline starting and finishing at left shoulder seam. The collarette seam shall finish in line with the left shoulder seam $(\pm 1/2 \text{ inch})$ Wales of collarette material should be perpendicular to neckline seam.	503 or 504	SSa-1	10-12	40 40 or 50 50
	Shoulder reinforcement After shoulders are seamed and collarette attached, reinforce the line of seaming across the shoulders and back of neck by applying a binding of basic fabric specified in 3.3.3, centered on the seams. The binding shall be cut along the wales and folded lengthwise to measure $1/2$ (+ $1/8$) inch. The stitching gauge shall be $1/4$ to $5/16$ inch.	301	SSag-3(b)	10-12	40 40 or 50 50
	Attach sleeves Seam sleeves to each armhole. Securely anchor the ends of the reinforcement strip in the armhole seams.	515 or 516 or 519	SSa-2	10-12	40 40 or 50 50
•	<u>Close body and sleeves</u> Stitch side body (when applicable) and underarm sleeve seams in a continuous row of stitching.	515 or 516 or 519	SSa-2	10-12	40 40 or 50 50
	<u>Wristlets</u> a. When a flat knit material is used, fold wristlets end to end and stitch with wales parallel to seam.	503 or 504	SSa-1	10-12	40 40 or 50 50

TABLE III - CONSTRUCTION OF JERSEYS

NO.	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH IN	THREAD NDL BOB/ LPR
	b. Fold wristlets in half lengthwise with stitching on inside and stitch to bottom of sleeve. Wales of wristlet material shall be perpendicular to seam and wristlet seam shall be in line with sleeve seam $(\pm 1/2 \text{ inch})$.	515 or 516 or 519	SSa-2	10-12	40 40 or 50 50
9.	<u>Make hem</u> Turn in bottom of jersey and seam, making hem to finish 1 $(+ 1/4)$ inch.	503 or 505	EFc-1	12-16	40 40 or 50 50
*10.	Actach size, identification and instruction label a. Locate label on inside center of jersey just below the collarette seam.				
	b. Stitch all four sides of label to jersey, approximately 1/16 inch from the edge.	301	LSbj-1	12-16	40 40 or 50 50
11.	<u>Clean jerseys</u> a. All thread ends shall be trimmed and all loose ends removed throughout the jersey. Care shall be taken so that damage to the jersey does not result.				
	b. All spots and stains shall be removed.				

c. Remove all shade tickets.

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3.8 Sizes and measurements. The wristlet shall be 3-1/2 (+ 1/4) inches wide when positioned flat and measured midway between the folded edges. The wristlet shall be 3 (+ 1/4) inches long when measured vertically between the top seam and the bottom folded edge of the wristlet. Sizes and measurements of the finished jerseys shall be as shown in Table IV (see Figure 1). All measurements and tolerances are expressed in inches.

<u> </u>	Overall Length	Chest Width	Sleeve Length	Collarette Opening
51ze	A	D	L	U
Small (34-36)	26-1/2	31	23	7-1/4
Medium (38-40)	27-1/2	34	24	7-1/4
Large (42-44)	28-1/2	37	25	8
X-Large (46-48)	29-1/2	40	26	8
Tolerance	<u>+</u> 1/2	<u>+</u> 1	<u>+</u> 1/2	<u>+</u> 1/4

Table IV - Finished Measurements

NOTE: All measurements shall be taken with the jersey flat and smooth, and in a relaxed condition with the front facing up with the sleeves extended horizontally and perpendicular to the body.

- A. Overall length Measure from intersection of the collarette seam and the shoulder seam to the bottom edge of the hem.
- B. Chest width Double the measurement across front, approximately 1 inch below armhole seam from folded edge to folded edge.
- C. Sleeve length Measure along outside folded edge of sleeve from the intersection of the armhole seam and shoulder seam to the bottom of the wristlet.
- D. Collarette opening Measure along top edge of collarette when in a flat releaxed position superimposing the front half on back half.

3.9 <u>Dimensional stability</u>. The finished jerseys shall not shrink nor elongate more than 8.0 percent in the overall length, sleeve length, or chest width when tested as specified in 4.4.2.4 (see 3.3.1.2).

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

4. QUALITY ASSURANCE PROVISIONS

4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the contractor may use his own or any other facilities suitable for 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 the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 <u>Certificate of compliance</u>. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

4.2 <u>Classification of inspection</u>. The inspection requirements specified herein are classified as follows:

- 1. First article inspection (see 4.3).
- 2. Quality conformance inspection (see 4.4).

4.3 First article inspection. The first article, submitted in accordance with 3.2 and 6.2, shall be inspected as specified in 4.4.2 for compliance with design, construction, workmanship, and dimensional requirements.

4.4 <u>Quality conformance inspection</u>. Sampling for inspection shall be performed in accordance with MIL-STD-105, except where otherwise indicated.

4.4.1 Component and material inspection. In accordance with 4.1 above, components and materials shall be tested in accordance with all the requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable procurement documents. In addition, testing shall be performed on the rib knit cotton cloth for the characteristics noted in Table V. The methods of testing specified in FED-STD-191, wherever applicable, and as listed in Table V shall be followed. The physical and chemical values specified in Section 3, except where otherwise specified, apply to the average of the determinations made on the sample unit for test purposes as specified in the applicable test methods. All test reports shall contain the individual values utilized in expressing the final results. The sample unit for test purposes shall be two continuous yards full width, for all tests except colorfastness. The sample unit for colorfastness shall be 1/3 of a yard, full width, for each color. The lot size shall be expressed in units of pounds. The lot shall be unacceptable if one or more sample units fail to meet any of the test requirements specified. The sample size shall be in accordance with the following:

Lot size (pounds)	Sample size (units)
800 or less	2
801 up to and including 22,000	3

22,001 and over

Table	V -	Test	methods
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	Requirement	Test
Characteristic	paragraph	method
		. /
Material identification	3.3.1	$\frac{1}{2}$
Knit type	3.3.1	Visual 2/
Yarn ply	3.3.1	Visual 2/
Yarn count	3.3.1	ASTN D1059-76 1/
Weight	3.3.1.1	5041 -
Wales per inch	3.3.1.1	5070
Courses per inch	3.3.1.1	5070
Bursting strength	3.3.1.1	5120
Resin or other non-fibrous		
materials added	3.3.1.2	2611 1/
Dyestuff type	3.3.1.4	2020 1/
Colorfastness to:	•	_
Light	3.3.1.5	5660 3/
Laundering	3.3.1.5	5610 4/
Perspiration	3.3.1.5	5680 5/
Crocking	3.3.1.5	5651

1/ Unless otherwise specified in the contract or purchase order, the contractor shall submit a certificate of compliance for this characteristic. The certificate shall be accompanied by actual test or inspection report or other verifiable data.

 $\frac{2}{}$ One determination shall be performed per sample unit and the results reported as "pass" or "fail".

3/ 20 Standard Fading Hours.

 $\frac{\overline{4}}{}$ Only the stain on the cotton fibers of the color transfer cloth shall be evaluated.

 $\frac{5}{}$ Report the results of whichever specimen has the lowest adjective rating (acid or alkaline).

4.4.2 Examination of the end item. Examination of the end item shall be in accordance with 4.4.2.1 through 4.4.2.4. The lot size shall be expressed in units of jerseys. The sample unit shall be one finished jersey. The inspection levels and the acceptable quality levels shall be as specified in 4.4.2.3.

4.4.2.1 Visual examination. The jerseys shall be examined for defects in color, design, material, (as defined in MIL-STD-1491) construction, workmanship and marking, and defects classified in accordance with the list below:

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Classification of defects

	Classif	icatio
Defects	Major	Mino
I. MATERIAL		
a. Any hole, cut, tear, mend, or drop stitch	x	
b. Any loose knitting, causing sleaziness		Х
c. Slubby yarn more than twice the size of the normal yarn	L	X
d. Any spot, stain, or streak		Х
e. Barre		X
f. Foreign matter, fly and etc. (score only when condition is visible at a distance of 3 feet)	X	
II. WORKMANSHIP		
a. Any component or operation omitted or not as		
specified	X	
b. Five or more untrimmed ends more than 1/4 inch in		
length, inside or outside of jersey		X
III. WRISTLET		
a. Not double thickness	X	
b. Not uniform in width		X
IV. COLLARETTE		
a. Not double thickness	X	
b. Improperly attached	X	
c. Not uniform in width		X
V. HEM		
a. Width of hem not uniform throughout		X
VI. LABEL		
a. Missing, incorrect, illegible, or not properly stitche	d	X
b. Misplaced		
VII. THREAD		
a. Not color specified		x
VIII. SHADE		
s. Other than specified	x	
b. Off shade		Х
c. Shaded part or parts		X
d. Dye streaks		X

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		Classif	ication
Defects		Major	Minor
IX. REINFO	DRCEMENT BINDING		
a. Mis	ssing	х	
b. Not	covering distance from shoulder seam to		
sho	bulder seam		X
c. *)	Not anchored in one or both armhole seams		X
K. SEAMS A	AND STITCHING		
a. End	is of stitching and thread breaks not backstitched		
or	backtacked as specified	X	
b. Any	y open seam (except on hem) <u>1</u> /	X	
c. Any	y open seam $1/2$ inch or more (on hem or label) $1/2$		X
d. Sti	ltch type not as specified	X	
e. Sea	am type not as specified	X	
f.Aı	cunoff of any seam measuring one inch or more		
cre	eating a raw edge which protrudes from seam line		
IBO I	re than 1/4 inch.		X
g. Sti	tch tension tight - stitches break when normal		
ter	nsion is applied to seams or hem		X
h. Sti	itch tension loose resulting in loosely secured		
sea	an or hen	<i></i>	X
1. Nul	ber of stitches per inch not within tolerances speci	fied	X
J. Any	y part of garment badly pleated, caught or twisted	v	
1n 1. No.	any unrelated row or stitches	X	
K. Nee	die chew, except on inner side of garment on	v	
	dle about on double fabric, inner side of germont	Λ	v
I. Net	are of stitching not as specified		A Y
n. * 1	improper stitch hite creating folds or pleats		X
0. Col	larette and left shoulder seam misaligned by more		~
the	an 1/2 inch		x
p. Wri	lstlet and underarm seam misaligned by more than		
1/2 inc	ch		X

1/ One or more broken stitches or two or more continuous skipped or runoff stitches constitutes an open seam. On double stitched seams (515 thru 519), a seam is considered open when either the joining seam (301 or 401) or the overedge seam (503) is open.

4.4.2.2 <u>Dimensional examination</u>. Any measurement deviating from the nominal dimensions and tolerances specified in Table IV shall be scored as a measurement defect. Sleeve lengths unequal in length by 1/2 inch or more shall be scored as a size measurement defect.

4.4.2.3 <u>Acceptable quality levels and inspection levels</u>. The inspection levels and acceptable quality levels (AQL's) expressed as defects per 100 units, for visual and dimensional examination shall be as follows:

For defects listed in 4.4.2.1:	AQL's	Inspection level
Major defects	2.5	II
Total defects (Major and Minor combined)	6.5	II
For defects listed in 4.4.2.2:		
One class	6.5	S-3

4.4.2.4 <u>Testing of the end item</u>. The methods of testing specified in FED-STD-191, and as listed in Table VII shall be followed. The physical values specified in Section 3 apply to the average of the determinations made on the sample unit for testing purposes, as specified in the applicable test method. The sample unit shall be three finished jerseys of each size in the lot. The lot size shall be expressed in units of jerseys. The lot shall be unacceptable if one or more sample units fail to meet any test requirement specified. The sample size shall be in accordance with the following:

Lot size (jerseys)	Sample size (units)
800 or less	2
801 up to and including 22,000	3
22,001 and over	5

Table VII - End item test methods

Characteristic	Requirement paragraph	Test method
Shrinkage or elongation		
Chest width	3.9	7556 1/
Overall length	3.9	7556 1/
Sleeve length	3.9	7556 1/

1/ Jerseys shall not be moistened or pressed before measuring. Jerseys shall be conditioned after drying for one hour in a relaxed supported state before measuring. Measurement shall be taken to the nearest 0.1 of an inch and shrinkage or elongation reported to the nearest 0.1 percent. Cotton laundering procedure shall be followed.

4.4.3 Examination of packaging requirements. An examination shall be made to determine that packaging, packing, and marking comply with Section 5 requirements of this specification. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully prepared for delivery except that it need not be closed. Defects of closure listed below shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 and the AQL shall be 2.5 defects per 100 units. Downloaded from http://www.everyspec.com -

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Examine	1

Defects

Marking (exterior) 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.
- Content Number of jerseys per package and shipping container is more or less than specified. 1/ Size shown on item not as specified on package or shipping container. 1/

1/ For these defects, two packages shall be examined from each shipping container in the sample.

4.4.4 <u>Palletization examination</u>. An examination shall be made to determine that the palletization complies with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one palletized unit load fully packaged. The lot size shall be the number of palletized unit loads in the end item inspection lot. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

Examine	Defect
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 Preservation-packaging. Packaging shall be level A or C, as specified (see 6.2).

5.1.1 Level A. Each jersey shall be folded as follows:

- 1. Place jersey front down.
- 2. Fold each side of the jersey in approximately 2 to 4 inches according to size so that the folded width is approximately 11-1/2 inches.

- 3. Fold sleeves at shoulder and place on top and parallel to the folded sides.
- 4. Fold in half by bringing the bottom of the jerseys to the top, so that the folded jersey measures approximately 11-1/2 inches by 14-3/4 inches. Five (5) folded jerseys, of one size and color only, with each jersey reversed end to end, shall be neatly stacked and securely tied with cotton tape or twine approximately 4 inches from each end to form a bundle.

5.1.2 Level C. Jerseys shall be packaged to afford adequate protection against physical damage during shipment from the contractor to the first receiving activity. The package and the quantity per package shall be the same as that normally used by the contractor for retail distribution.

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

* 5.2.1 Level A. Fifty (50) jerseys, (10 bundles of 5 each) of one size and color only, packaged as specified in 5.1, shall be packed in a fiberboard shipping container, assembled, closed and reinforced conforming to type CF, class weather-resistant, variety DW, grade V15c, size 3A of MIL-B-17757. The liner shall be type CF, class domestic in accordance with the requirements specified in MIL-B-17757. Level A packages shall be stacked flat, two in length, one in width, and twenty-five in depth within a shipping container, with the longer dimensions parallel to the end panels of the box. Each container shall have the contents completely covered on the top and bottom with a sheet of commercial grade kraft paper. Toward the end of the contract or order, or when there is less than the required amount per container of the same size, mixed sizes may be packed within the same shipping container.

* 5.2.2 Level B. Fifty (50) jerseys (10 bundles of 5 each) of one size and color only, packaged as specified in 5.1, shall be packed in a fiberboard shipping container assembled and closed and reinforced conforming to type CF, class domestic, variety DW, grade 275, size 3A of MIL-B-17757. The liner shall be type CF, class domestic, in accordance with the requirements specified in MIL-B-17757. Level A packages shall be stacked flat, two in length, one in width, and twenty-five in depth within the shipping container with the longer dimension parallel to the end panels of the box. Each container shall have the contents completely covered on the top and bottom with a sheet of commercial grade kraft paper. Toward the end of the contract or order, or when there is less than the required amount per container of the same size, mixed sizes may be packed within the same shipping container.

5.2.3 Level C. Jerseys, packaged as specified in 5.1, shall be packed in a manner to insure carrier acceptance and safe delivery to destination at the lowest transportation rates for such supplies. The quantity per shipping container shall be the same as that normally used by the contractor for retail distribution. Containers shall comply with the US Postal Service Manual, Uniform Freight Classification Rules or National Motor Freight Classification Rules as applicable.

5.3 <u>Palletization</u>. When specified (see 6.2), jerseys packed as specified in 5.2 shall be palletized on a four way entry pallet in accordance with load type 1A of MIL-STD-147. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means C, K, and L or O or P. Pallet pattern shall be in accordance with the appendix of MIL-STD-147.

The pallet shall be 4-way, Type IV, V or VIII, Class 1, Style A, Size 2, wood group I,III, or IV, Grade A of NN-P-71, or 4-way, Style 1, Size A, Type I, Class 1, wood group I, II, III or IV, Grade A, of MIL-P-15011. Interlocking of loads shall be effected by reversing the pattern of each course. If the container is of a size which does not conform to any of the patterns specified on MIL-STD-147, the pallet pattern used shall be approved by the contracting officer.

5.4 <u>Marking</u>. In addition to any special marking required by the contract or order, shipping containers shall be marked in accordance with MIL-STD-129.

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

6. NOTES

6.1 <u>Intended use</u>. The jerseys are intended for wear by flight deck personnel aboard aircraft carriers to designate their assigned duties as follows:

Phone talkers
Plane pushers
Catapult and arresting gear personnel
Flight deck officers and plane directors
Plane captains and mechanics
Ordnance men
Fuel handlers

6.2 Ordering data. Procurement documents should specify the following:

a. Title, number, and date of this specification.

b. Color and size required (see 1.2 and 3.3.1.3).

- c. Selection of applicable levels of packaging and packing required (see 5.1 and 5.2).
- d. When a first article inspection is required, the item will be tested and should be a first article sample. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, quantity, and testing and approval of the first article (see 3.2).

e. When palletization is required (see 5.3).

6.3 <u>Samples and patterns</u>. For access to samples and patterns, address the procuring activity issuing the invitation for bids (see 3.1 and 3.5).

* 6.4 <u>Changes from previous issue</u>. The margins of this specification are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodian: Navy - NU

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Preparing Activity: Navy - NU

Review Activity: DLA - CT Navy - CG, AS

User Activity: Navy - SH Project No. 8415-N327



Fig. 1-JERSEY, FLIGHT DECK CREWMAN'S

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I. DOCUMENT NUMBER MIL-J-82281C(NU)	2. DOCUMENT TITLE JERSEY, FLIGHT DECK CREWMAN'S	
S. NAME OF SUBMITTING ORG	ANIZATION	4. TYPE OF ORGANIZATION (Merk one)
b. ADDRESS (Struct, City, State, ZIP Code)		
. PROBLEM AREAS		1
e. Persgraph Number and Wordin	₽ :	
b. Personmended Warding:		
c. Reaton/Retionals for Recomm	nendetion:	
6. REMARKS		
74. NAME OF SUBMITTER (Last,)	First, Mi) — Optional	S. WORK TELEPHONE NUMBER (Include Area
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