# U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

#### **SPECIFICATION**

### PANTS, FLAME RESISTANT

This amendment forms part of Forest Service Specification 5100-92G, dated March, 1999.

Page 1

1.2, under inseam, delete "29, 33" and replace with "30, 34."

Page 2

2.1.1, delete reference to "DDD-L-20"; add the following:

MIL-DTL-32075 - Label: For Clothing, Equipage, and Tentage (General Use)

Page 4

3.1, delete "29 inch inseam" and replace with "34 inch inseam."

Add the following paragraph:

- "3.1.1 <u>Third-party certification</u>. The pants shall be third-party certified to the requirements of this specification, including the complete requirements of NFPA 1977-1998 with the exception of section 2-6 (regarding ISO Registration) and the wording required by section 3. The third-party certifier shall otherwise meet the requirements of NFPA 1977-1998 section 2.
- 3.2, add the following to the end: "MTDC-973, dated 2/99, shall be modified by the contractor as necessary to permit finished inseam lengths of 30 and 34 inches in lieu of the patterned respective inseam lengths of 29 and 33 inches."
- 3.2.1, add the following to the end: "In Table I of 5100-88C, <u>Physical Requirements</u>, Type I, Breaking strength, pounds minimum, delete 290 and replace with 260."
- 3.2.2, delete entirely and replace with the following:
  - "3.2.2 <u>Thread</u>. The aramid thread shall conform to Type I, Tex size 35 of A-A-55217 or Type II, Tex size 27 of A-A-55217, and Type I, Tex size 78 of A-A-55217 or Type II, Tex size 60 of A-A-55217, color spruce green. All thread shall meet the requirements of A-A-55217. Alternately, the thread may olive drab color."

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- 3.2.3, delete the last sentence and replace with: "The color shall match basic fabric. Alternately, the color may be olive drab."
- 3.2.6, delete and replace with the following:
  - "3.2.6 Waist take-up tape. The waist take-up tape shall be 3/4 inch wide aramid tape, and shall be C.M. Offray & Son, Inc., style #70-6185-2007-3/4 inch, color black (see 6.4)."
- 3.2.8.1, delete and replace with the following:
  - "3.2.8.1 Cuff closure cord. The cord for the cuff closure shall be a continuous Nomex® cord with Kevlar® core, shall be Atlantic Thread and Supply Co. Inc. style #4330, color black."
- 3.2.8.2, delete without replacement.

## Page 5

- 3.2.11.1, delete and replace with the following:
  - "3.2.11.1 Combination label. The combination identification/care label shall meet the product labeling requirements of NFPA 1977-1998 for laundering and dry cleaning. The label shall include the following warning and information printed in letters at least 1/16th inch in height:

THIS WILDLAND FIRE FIGHTING PROTECTIVE GARMENT MEETS THE REQUIREMENTS OF FOREST SERVICE SPECIFICATION 5100-92G.

[Manufacturer's name]1/

[Manufacturer's address]1/

[Country of origin]1/

[Manufacturer's garment identification number, lot number, or serial number]1/

PANTS, FLAME-RESISTANT ARAMID

DATE OF MANUFACTURE: [mm/yy]1/

USDA FOREST SERVICE SPECIFICATION 5100-92G

SIZE: [waist size range in inches x inseam in inches]1/

CONTRACT NUMBER: [ 11/ 11/

NSN: [

MATERIALS CONTENT: 98% ARAMID, 2% CARBON CORE

[Authorized mark of certifying organization]1/

DATE OF CERTIFICATION [mm/yy (as a minimum) ]1/

### CARE INSTRUCTIONS

- a. Machine wash hot. NO BLEACH.
- b. Wash separately from flammable, lint-producing fabrics.
- c. Rinse thoroughly. Soap or detergent residues will burn.
- d. DO NOT STARCH. Starch will burn.
- e. Tumble dry medium. Remove garment promptly.

DO NOT REMOVE THIS LABEL

1/ The manufacturer shall insert the applicable information."

3.2.11.2, delete "(i.e. 26-30 x 29)" and replace with "(26-30 x 30)"; last sentence delete "DDD-L-20" and replace with "MIL-DTL-32075".

## Page 8

Table II, in the Inseam column, replace "29, 33" with "30, 34".

## Page 10

Table III, Operation 1f, add the following sentence at the end of the first sentence: "At the manufacturer's option, two 1-1/2 inch long strips may be substituted for each 3 inch long strip."

Table III, step 1g, add the following: "Sonic fusing of the ends to prevent raveling is acceptable as an alternative to the bartacking the ends of the tape."

Table III, step 1h, delete and replace with the following: "Cut 2 pieces of cuff closure cord for each pair of pants. The cuff closure cords for the 26-30, 28-32, and 30-34 pants shall be 25  $\pm$ 1/4 long. The cuff closure cords for the 32-36, 34-38, and 36-40 pants shall be 27  $\pm$ 1/4 long. The cuff closure cords for the 38-42 and 40-44 pants shall be 29  $\pm$ 1/4 long."

## Page 12

Table III, Operation 7(e), add the following to the end of the sentence: "of each strip."

Table III, Operation 8(c), add "of each strip" between "all four sides" and "through the hem" at the end of the sentence. Delete "1/16 to 3/32" and replace with " $1/8 \pm 1/16$ ".

#### Pages 16 & 17

Table III, Operation 15 and 19, add the following to the end: "For the flaps only, at the manufacturer's option, the stitch lines may be backstitched 1/2 inch in lieu of bartacking."

## Page 19

Table III, step 25c, delete and replace with the following: "Thread the loose end of the long pieces through the tri-bar slides as shown by the 'locked' portion of figure 1."

Table III, step 25c, add figure 1 (attached) to the requirements.

Table III, step 26b, delete and replace with the following: "One centered between the outseam and center front of the pants."

## Page 20

Table III, step 29b, delete and replace with the following: "Vertically bartack through fabric at the inseam catching the cuff closure cord. The cuff closure cord shall be caught at the center -1 inch, with the longer end routed through the back panel."

Page 21

Table III, step 29c, delete and replace with the following:

"With the loose ends of the cuff closure cords threaded through the eyelets, turn up bottoms as indicated on patterns with the raw edges turned in, catching the cuff closure cords inside the hem space, and single stitch through the legs of the pants 1/16 to 1/8 inch from the edge of the fold, starting and finishing at the inseams. The hem shall finish 1  $\pm$ 1/8 inches in width. The cuff closure cord shall be loose inside each hem. The ends of the cuff closure cord shall each be finished with an overhand knot."

Table III, step 29d, delete without replacement.

Page 23

- 4.3.2, delete and replace with the following:
  - "4.3.2 <u>Certification</u>. As a part of the first article submission the contractor shall provide certificates of compliance (COC) for the materials of the pants. The COCs shall be supported by test reports on the component, these test reports shall also be submitted as a part of the first article submission. Test reports supplied by the manufacturer are acceptable. The COC shall include the following:

Specification with type, class, etc.
Quantity purchased
Purchase source, address, and telephone number
Purchase date

4.3.2.1 NFPA 1977-1998 Chapter 2, Certification. Copies of all test results shall be submitted by the third party certifier as a part of the first article submission.

Page 31

Table IV, under Cuff Closure, delete defects (b) and (c) without replacement.

## Page 35

- 6.4, delete and replace with the following:
- 6.4 <u>Known sources</u>. The following are know sources for items referenced in this document:

Waist take-up tape
C.M. Offray & Sons, Inc.
Rt. 24, Box 601
Chester, NJ 07930
908-879-4700

Tri-bar slide
American Cord and Webbing Co., Inc.
88 Century Dr.
Woonsocket, RI 02895-6116
(401) 762-5500

Button and tack
Universal Fasteners, Inc.
P.O. Box 240
Lawrenceburg, KY 40342

Cuff closure cord
Atlantic Thread and Supply Co.
8515 Kelso Drive
Baltimore, MD 21220
800-287-4624

Eyelets Scovill Fasteners PO Box 44 Clarkesville, GA 30523 (888) 726-8455

