

Royal Canadian Mounted Police Gendarmerie royale du Canada Doc. no: G.S. 1045-299 Date: 2013-07-18

# Specification

# Liner, Patrol, Unisex

This document has 26 pages including the drawings.

This document was created in English.

The document is available in English and French.

☑ English/Anglaise Français/French

The photograph on this page is for reference only.



Issued on the authority of the Commissioner, Royal Canadian Mounted Police.

## Modifications

Date	Para. No's	Modifications
2007-08-03		Original Specification
2008-02-22	Page 5, Para. 4.1.6	Dome fastener changed to powder coated cap.
2012-05-14		Liner Patrol to be worn as a standalone jacket as well as a liner made changes required throughout the spec to reflect the following:  1) Added Shoulder strap at shoulder seam  2) Added requirement of RCMP shoulder badges to be sewn to the sleeve head  3) Loop tape for name tag to be attached to the right front yoke  4) Mic Loops added to both front yoke  5) Front & Back yoke and elbow patches added in Flame Resistant Woven Material  6) Reversible slide fastener added to front
2013-07-18	Para. 2.9 Para. 2.10 Para. 4.1.3.1 & 4.1.3.2 Para. 4.1.5, 4.1.6, 4.1.12.1 & 4.1.12.2 Para. 4.3.11 Appendix C	Updated CGSB standard. Added standard for Aramid spun thread. Updated thread as per industry standard. Changed validation certificate to Certificate of Compliance. Specified date in numeric format. Definitions and criteria revised.

#### **RCMP VIEWING SAMPLE**

A viewing sample, when available, will be supplied to the successful tenderer.

This will be used for the guidance of the manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification shall govern.

It may be obtained from:

Royal Canadian Mounted Police ATTN: Uniform and Equipment Program (440 Coventry Road, Warehouse Building) 1200 Vanier Parkway Ottawa, Ontario K1A 0R2

It will be sent "prepaid" and is to be returned "prepaid".

The viewing sample shall be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples shall be replaced by an identical item or the RCMP shall be reimbursed for the cost of an acceptable replacement.

#### **SPECIFICATION**

#### LINER, PATROL, UNISEX

#### 1. **Definition**

- 1.1 This specification shall govern the manufacture and inspection of Liner, Patrol, Unisex.
- 1.2 This specification, pattern, drawing, viewing sample or other information issued in connection therewith, may only be used for specific enquiries, tenders, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for R.C.M.P. Liner, Patrol, Unisex.

#### 2. **Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the invitation to tender, unless otherwise specified.
- 2.2 CAN/CGSB 4.2 Textile Test Methods.
- 2.3 CAN/CGSB 155.1-98 Firefighters' Protective Clothing for Protection Against Heat and Flame.
- 2.4 CAN/CGSB 155.20 Workwear for Protection Against Hydrocarbon Flash Fire.
- 2.5 FTMS-191 A, Federal Standard, Textile Test Methods, Method 5931, Method 5206.
- 2.6 ASTM, American Society for Testing and Materials, Method D- 4108, D-2594.
- 2.7 AATCC 16E-1993 American Association of Textile Chemists and Colorists Technical Manual.
- 2.8 ISO 6330-1984 (E), International Standard.

- 2.9 CAN/CGSB 86.1-2003, Care Labeling of Textiles.
- 2.10 A-A-55217B, Thread Aramid, Spun Staple

#### 3. General Requirements

- 3.1 The article or material covered by this specification shall be free from imperfections or blemishes such as may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the pattern and viewing sample.
- 3.2 <u>Design</u> The Liner, Patrol, Unisex shall be a loose fitting, waist length, and is designed to be worn in conjunction with the "Jacket, Patrol, Unisex" as a liner or standalone garment. The liner is constructed from a flame resistant fleece, with flame resistant woven material on the front yoke, back yoke, elbow patches, shoulder straps and inside pockets. The side seams shall have a slide fastener from the sleeve underarm to waist for ventilation and weapon access.
- 3.3 In the event of any inconsistency in contract documents, specification, pattern, drawing, or viewing sample, the aforementioned shall prevail in the following order:
  - (i) Contract
  - (ii) Specification
  - (iii) Pattern
  - (iv) Drawing
  - (v) Viewing Sample

#### 4. **Detail Requirements**

#### 4.1 Materials

4.1.1 <u>Shell Material (Fleece)</u> - The fleece shall be flame resistant, navy in colour, with a velour finish on both sides which resists pilling. It shall contain 2% carbon fiber, stained or dyed to match navy fleece and must meet the requirements outlined in Table I forming part of this specification.

Refer to Appendix C for required documentation.

4.1.2 <u>Shell Material (Woven)</u> - The woven shell material shall be flame resistant; Nomex IIIA, navy in colour (of matching shade to the fleece material) and shall

meet the requirements outlined in Table II forming part of this specification. Refer to Appendix C for required documentation.

- 4.1.3.1 <u>Thread for Stitching</u> 100% Craq Spun Nomex® thread; 40 Tex; navy blue to match the shell material, meeting A-A-55217B Type II.

  Certificate of compliance required.
- 4.1.3.2 <u>Thread for Serging</u> 100% Spun Nomex® thread; 27 Tex; navy blue to match the shell material, meeting A-A-55217B Type I.

  Certificate of compliance required.
- 4.1.4 **Pocketing** As per Table II.
- 4.1.5 <u>Hook and Loop Tape</u> Shall be woven nylon, black in colour, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength with an initial peel strength of 1 P.I.W and after 1000 cycles shall be not less than .5 P.I.W. with a minimum lengthwise shear of 4 P.S.I. Certificate of compliance required.
- 4.1.6 <u>Dome Fastener</u> The dome fastener shall be a standard type 24 ligne fastener.
   All metal parts to be brass with a 15 mm matte black, powder coated cap.
   Universal SW61 (only).
   Certificate of compliance required.
- 4.1.7 <u>Elastic Side Seam Closure Strap</u> The side seam closure strap shall be a double layer of pre-shrunk, woven polyester elastic of superior quality, 2.5cm wide, black in colour equal in all respects to the viewing sample.
- 4.1.8 **Ribbon Slide Fastener Pulls** Commercially available ribbon pull, black in colour equal in all respects to the viewing sample.
- 4.1.9 <u>Twill Tape Shoulder Seams</u> The twill tape used on the shoulder seams shall be 6mm wide, 100% polyester, black in colour.
- 4.1.10 <u>Microphone Strap</u> Constructed from Woven Shell Material meeting the requirements outlined in Table II, 3 cm wide ± .5cn total finished length.
- 4.1.11 <u>Shoulder Badges</u> Shall be as per RCMP specification G.S, 1045-266, Badges & Epaulettes, Rank (Woven Type) Drawing # 1 Badge, Shoulder, Cloth.
   To be purchased from the Royal Canadian Mounted Police.

## 4.1.12 <u>Slide Fasteners</u> - Lengths - (Measurements in inches)

Height	Sizes	Front	Side Seam	Height	Sizes	Front	Side Seam
X Short	XX Small	13½"	13"	Tall	XX Small	19½"	19"
4'11"-5'2"	X Small	141/2"	13"	5'11'' - 6'2''	X Small	20"	19"
150cm - 157.5cm	Small	15"	13"	180.5cm -	Small	21"	19"
	Medium	15½"	14"	188cm	Medium	22"	20"
	Large	16½"	14"		Large	221/2"	20"
	X Large	17½"	15"		X Large	23½"	21"
	2X Large	18"	15"		2X Large	24"	21"
	3X Large	19"	15"		3X Large	25"	21"
	4X Large	20"	16"		4X Large	25½"	22"
	5X Large	201/2"	16"		5X Large	26"	22"
Short	XX Small	15½"	15"	X Tall	XX Small	21½"	21"
5'3'' - 5'6''	X Small	16"	15"	6'3'' - 6'6''	X Small	22"	21"
160cm - 167.5cm	Small	17"	15"	190.5cm -	Small	23"	21"
	Medium	18"	16"	198cm	Medium	24"	22"
	Large	181/2"	16"		Large	241/2"	22"
	X Large	19½"	17"		X Large	25½"	23"
	2X Large	20"	17"		2X Large	26"	23"
	3X Large	21"	17"		3X Large	27"	23"
	4X Large	22"	18"		4X Large	271/2"	24"
	5X Large	22½"	18"		5X Large	281/2"	24"
Regular	XX Small	171/2"	17"	XX Tall	XX Small	23½"	23"
5'7'' - 5'10''	X Small	18"	17"	6'7'' - 6'10''	X Small	24"	23"
170cm - 177.5cm	Small	19"	17"	200.5cm - 208	Small	25"	23"
	Medium	20"	18"	cm	Medium	25½"	24"
	Large	20½"	18"		Large	26½"	24"
	X Large	21½"	19"		X Large	27"	25"
	2X Large	22"	19"		2X Large	28"	25"
	3X Large	23"	19"		3X Large	29"	25"
	4X Large	24"	20"		4X Large	29½"	26"
	5X Large	241/2"	20"		5X Large	301/2"	26"

- 4.1.12.1 Slide Fastener Front Shall be a flame-retardant and heat resistant slide fastener with Nomex® tape. It shall be constructed to have an open-end separator, black in colour, injection molded, with a DA auto-lock slider. YKK Product code #27972 VSHROR 56 DA E 5/8\*5VS NMX-HR\*(only). Certificate of compliance required.
- 4.1.12.2 <u>Slide Fastener Side Seam</u> Shall be a flame-retardant and heat resistant slide fastener with Nomex® tape, black in colour with three DA large hole sliders, two arranged in a head to head relation and one opening from the bottom as per the sample and drawing #2. YKK Product Code #26408 VSHRMC 56LHDx3 E \*TS-BTM\*B-B\*H-H\*NMX\*(only).

  Certificate of compliance required.
- 4.2 <u>Size and Dimensions</u> Liner, Patrol, Unisex, to this specification shall be supplied in the sizes specified by the R.C.M.P. and to the dimensions given in the scale of measurements and drawings. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix A forming part of this specification.

#### 4.3 **Construction**

4.3.1 <u>Stitching</u> - All stitching shall be lockstitch Type 301 or lock-chain stitch Type 401 having not less than three or more than four stitches per centimeter. The ends of all seams shall be securely backstitched and tacked. Both armhole and underarm seams shall be stitched and serged seamed. Care shall be taken to minimize unsightly gathering and puckering.

#### 4.3.2 **Body**

- 4.3.2.1 <u>Back & Back Yoke</u> The back portion shall be made of flame resistant fleece as specified in Para. 4.1.1. There shall be a back yoke made from woven shell material as specified in Para. 4.1.2, applied to the upper back and top stitched. The back hem facing made from woven shell material as specified in Para. 4.1.2 shaped and dimensioned as per the pattern shall be sewn to the bottom portion of the liner back to create a hem. The back and back hem facing shall be shaped and dimensioned as per the patterns.
- 4.3.2.2 **Front** The front portions shall be made from flame resistant fleece as specified in Para. 4.1.1. shall have right and left front yokes made from woven shell material as specified in Para. 4.1.2, applied to the upper fronts and top stitched. The outer left and right front yokes shall be equipped with a microphone strap constructed from woven shell material shaped and dimensioned as per the patterns. The mic straps shall be sewn, turned, edge stitched and applied securely with the raw edges turned under. The outer right front yoke shall have an 8.5cm x 2.5cm ± .5cm piece of loop tape for the name tag positioned as per the pattern template. Both fronts shall have inside pockets complete with pen pockets made

from woven flame resistant shell material as specified in Para. 4.1.2. The front shall be equipped with a center front slide fastener complete with a reversible slider as outlined in Para. 4.1.12.1 and lengths specified in 4.1.12. Caution shall be taken to ensure that the reversible slide portion and its retaining box are sewn to the left front. The front hem facing made from woven shell material as specified in Para. 4.1.2, shall be sewn to the bottom portion of the fronts to create the hem. All components of the fronts shall be constructed as per the patterns, drawings and viewing sample.

- 4.3.2.3 <u>Inside Pockets</u> The left and right fronts shall have inside pockets made from woven shell material as specified in Para. 4.1.2. Both right and left pocket openings shall be secured with a 6 cm x 2.5cm ± .5cm wide piece of hook and loop tape. The inside pockets shall be securely fastened to the center fronts. Attached to the center front of each inside pocket shall be a pen pocket made from woven shell material positioned and dimensioned in accordance with the patterns and drawing #3. Labels as outlined in Para. 4.3.9 and 4.3.10 shall be sewn to the left inside pocket bag with the Identification and Marking and Cleaning Instructions.
- 4.3.2.4 **Shoulder Seams** The back and front of the shoulder seams when sewn shall be taped from neck to shoulder with twill tape as specified in Para. 4.1.9 and serged.
- 4.3.3 <u>Side Seams</u> Both side seams from the sleeve underarm to the hem shall be equipped with a slide fastener as specified in Para 4.1.12.2 with lengths as specified in Para. 4.1.12. There shall be 3 sliders, the two closest to the underarm should be in a head to head position and the third opening from the bottom upwards as shown in drawing #2. All side seam sliders shall be equipped with ribbon pulls as specified in Para 4.1.8. The side seam hem shall have a side seam closure strap as specified in Para. 4.1.7 constructed as per the drawing and viewing sample.
- 4.3.4 <u>Side Seam Closure Strap</u> There shall be a 8 cm x 2.5cm ± .5cm wide side seam closure strap at side seam hem, made from elastic as specified in Para. 4.1.7. It shall be sewn to the lower back side seam flipping towards the front, equipped with a female dome fastener for closure. The corresponding male dome fastener shall be applied to the liner front at the hem.

- 4.3.5 <u>Sleeve & Sleeve Cuffs</u> The sleeves and cuffs shall be constructed from flame resistant fleece as specified in Para. 4.1.1. Each sleeve shall have a RCMP shoulder badge as per Para. 4.1.11, sewn and centered 2.5cm below the sleeve head. Each sleeve shall have an elbow patch applied and top stitched made from woven shell material as specified in Para. 4.1.2. There shall be a one piece self-cuff sewn and serged to the bottom of the sleeve. The sleeves and cuffs shall conform in all respects to the patterns and viewing sample.
- 4.3.6 <u>Shoulder Straps</u> Shoulder straps shaped and dimensioned in accordance with the patterns and drawing # 3, shall be made from two layers of flame resistant woven material as specified in Para. 4.1.2. They shall be sewn into the sleeve-head and positioned as per the pattern and viewing sample. The free end of the strap shall be secured to the jacket shoulder with the dome fastener specified in Para. 4.1.6. The female portion of the dome fastener shall be applied to the shoulder strap and the male portion shall be applied to the jacket shoulder.
- 4.3.7 <u>Collar</u> The collar is to be designed as per patterns and viewing sample and constructed from flame resistant fleece as specified in Para. 4.1.1.
- 4.3.8 Coat Hanger A 6cm  $\pm$  .5cm long coat hanger constructed from woven shell material as specified in Para. 4.1.2 or twill tape as per Para. 4.1.9 shall be sewn securely in the center of the neck seam in accordance with the viewing sample.
- 4.3.9 <u>Instruction Sheet</u> Each completed liner shall have an instruction sheet folded and inserted into the inside chest pocket bag, with the information included in Appendix B English and French, outlining the Care Instructions for the flame resistant materials used.
- 4.3.10 <u>Identification Label</u> Each liner shall have a durable blank label 7.5cm x  $2 \text{cm} \pm .5 \text{cm}$  applied <u>separately</u> below the marking and cleaning label used for the inscription of the wearer's name.
- 4.3.11 <u>Marking & Cleaning Instructions Label</u> Each liner shall have a durable label sewn to the bottom of the inside pocket bag as shown in drawing #3, with the following information in English and French:

Where the word 'insert the' appears, enter only the information requested (Example: Insert the Size/Taille, enter L-Regular)

RCMP, LINER, PATROL, UNISEX	DOUBLURE PATROUILLE UNISEXE GRC						
FLAME RESISTANT LINER - NOMEX IIIA	DOUBLURE IGNIFUGE - NOMEX IIIA						
Machine wash separately - cold	Laver à la machine séparément - l'eau froide						
Do not bleach	Ne pas utiliser d'agent de blanchiment						
Do not use softeners	Ne pas utiliser d'adoucisseur de tissus						
Lay flat to dry	Sécher à plat						
Further care instructions: App. 9-1, UDM	Instructions d'entretien supplémentaires: ANN. 9-1, MUT						
Insert the Date of Manufacture/ Date de fabrication (NUM	ERIC/NUMERIQUE – ie/ex. 2012-09)						
Insert the Manufacturer's Identification/ Identification du f	abricant						
Insert the Size/ Taille	ne Size/ Taille						
insert the RCMP Stock Number/ Numéro d'article de la GRC							

Note: The manufacturers identification shall not appear anywhere on the garment except on the garment label as indicated.

#### 5. Delivery, Packing and Marking of Containers

- 5.1 Unless otherwise specified the items shall be delivered to the Commissioner, R.C.M.P., Uniform and Equipment Program, Ottawa, Ontario, free of transportation charges and provincial tax.
- 5.2 Packing and marking of shipping containers shall be as specified in the invitation to tender.
- 5.3 A packing slip shall be enclosed showing contents of each shipment.

#### 6. **Quality Assurance Provisions**

Responsibility for Inspection - Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the R.C.M.P., Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests specified in this specification or by demonstrating to the satisfaction of the R.C.M.P., Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use any independent, North American ISO 9001 certified and ISO 17025 "Textile" certified testing facilities. Certification will be required.

Note: CTT Group Inc., is known to meet this requirement.

- The R.C.M.P., Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 6.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

## TABLE I (FLEECE)

Color	Navy color to match swatch available from RCMP Uniform and Equipment Program.						
Fiber content	93% Nomex 5% Kevlar 2% Carbon						
Surface Type - Face - Back	Non pill velour Non pill velour						
Width	152cm min.						
TEST	RCMP REQUIREMENTS	TEST METHOD					
Mass	$260 \text{ g/m}^2 \pm 8 \text{ g/m}^2$	CAN/CGSB-4.2, No. 5.1 - M90					
Fabric Thickness Initial and after 5 washes	6 mm (min.) 8 mm (max.)	CAN/CGSB-4.2, No. 37 - 2002					
Stiffness (drape) Cantilever Bending Method	Length: 2.5cm (max.) Width: 2.5cm (max.)	FTMS 191 5206					
Stretch Properties After 1 hour	Length: 2% of growth (max.) Width: 5% of growth (max.)	ASTM D 2594-99a					
Flame Resistance - Damaged length - After Flame	Warp: 48 mm (max.) Weft: 35 mm (max.) 2 sec after flame (max.)	CAN/CGSB- 155.20 Para. 7.1					
Thermal Protective Performance (TPP)	15 cal/cm <sup>2</sup> (min.)	CAN/CGSB-155.1-98, Para. 6.1 - Appendix A					
Bursting Strength	400 Newton (min.)	CAN/CGSB-4.2, No. 11.2 - M89					
Resistance to Pilling After 30 minutes	4 = slight pilling or better	CAN/CGSB-4.2, No. 51.2 -M87					
Dimensional Change in Laundering After 5 washes	5% (max.)	ISO 6330-1984(E)					
Colorfastness							
Light	Equal to AATCC Standard L4 or better	CAN/CGSB-4.2, No. 18.3-97					
Washing	Grey scale 4 or better	CAN/CGSB 4.2, No.19.1 - M90					
Perspiration	Grey scale 3 or better	CAN/CGSB-4.2, No. 23 - M90					
Crocking Wet: Dry:	Grey scale 4 or better Grey scale 4 or better	CAN/CGSB-4.2, No. 22 - M90					

**Note:** Refer to Appendix C for required documentation.

### TABLE II (WOVEN MATERIAL)

Fiber content	100% Nomex <sup>®</sup> III A							
Colour	To match Fleece (Table I)							
Mass	$192g/m^2 \pm 8g/m^2$							
Weave	Plain Weave							
Width	152cm min.							
TEST	RCMP REQUIREMENTS	TEST METHOD						
Flame Resistance		CAN/CGSB-4.2 No.27.1 - 94						
- Damaged length - After flame	- 80 mm (max.) - no after flame							
Thermal Protective Performance (TPP)	11 cal/cm <sup>2</sup> (min.)	ASTM D- 4108 (with 1/4" Spacer)						
Electrostatic Decay	0.5 second (max.)	FTMS 191 A Method 5931						
- Initial - After 5 washes								
Resistance to Pilling	4 (min.) = slight pilling or better	CAN/CGSB-4.2, No. 51.2 - M87						
Dimensional Change - After 5 washes	5% (max.)	ISO 6330-1984(E)						
Colorfastness								
Washing	Grey scale 4 or better	CAN/CGSB 4.2, No.19.1 - M90						
Perspiration	Grey scale 4 or better	CAN/CGSB-4.2, No. 23 - M90						
Light	Grey scale 3 or better	AATCC Test Method 16E-1993						
Crocking Wet: Dry:	Grey scale 4 or better Grey scale 4 or better	CAN/CGSB-4.2, No. 22 - M90						

**Note:** Refer to Appendix C for required documentation.

#### **APPENDIX A**

#### **Sealed Pattern Identifier**

Pattern #: G.S. 1045-299 Title: Liner, Patrol, Unisex

Paper Patterns - Paper patterns are available from the R.C.M.P., Uniform and Equipment Program, Ottawa Ontario, under Pattern # G.S.1045-299. Firms requested to produce Precontract Award Samples will be provided with the base pattern only. The full set of patterns either in individual sizes or as a graded nest will be provided to the successful bidder after the contract is awarded.

The paper patterns include seam allowances, drill holes and/or placement templates. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed.

All patterns are property of the RCMP and must be returned upon completion of the contract.

Pattern Pieces-This design has 16 pattern components.

Cut 1 Single Cut 1 Paired	=	Cut 1
Cut 1 Paired	=	Cut 2

Legend:

Pattern	Nomenclature	Quantity to	Material
Components		be cut	
# <b>1</b> of 16	Back	1 Single	Fleece Shell Material
# <b>2</b> of 16	Front	1 Paired	Fleece Shell Material
# <b>3</b> of 16	Sleeve	1 Paired	Fleece Shell Material
# <b>4</b> of 16	Cuff	1 Paired	Fleece Shell Material
# <b>5</b> of 16	Collar	1 Single	Fleece Shell Material
# <b>6</b> of 16	Pocket Lining (Top piece)	1 Paired	Woven Shell Material
# <b>7</b> of 16	Pocket Lining (Bottom Piece)	1 Paired	Woven Shell Material
# <b>8</b> of 16	Back Hem Facing	1 Single	Woven Shell Material
# <b>9</b> of 16	Front Hem Facing	1 Paired	Woven Shell Material
<b>#10</b> of 16	Pen Pocket	1 Paired	Woven Shell Material
<b>#11</b> of 16	Yoke - Back	1 Single	Woven Shell Material
<b>#12</b> of 16	Yoke - Front	1 Paired	Woven Shell Material
# <b>13</b> of 16	Shoulder Strap	2 Paired	Woven Shell Material
<b>#14</b> of 16	Elbow Patch - Front	1 Paired	Woven Shell Material
<b>#15</b> of 16	Elbow Patch - Back	1 Paired	Woven Shell Material
<b>#16</b> of 16	Mic Strap	1 Paired	Woven Shell Material

#### **APPENDIX B**

#### **CARE INSTRUCTIONS**

Applicable To: Liner Patrol Unisex Jacket Special Duty

This garment is designed to be both flame resistant and static-dissipative. The best way to maintain its performance is to keep it clean and free of flammable contaminants by washing it regularly.

DO NOT USE FABRIC SOFTENER OR DRYER SHEETS DO NOT USE BLEACH DO NOT USE DELICATE WASH DETERGENTS (ie. Woolite, Zero)

#### **Machine Wash:**

Close all zippers, fasteners and velcro before washing.

Wash in cold water separately, using liquid detergent. (ie. Liquid Tide, Liquid Cheer)

If heavily soiled, use a pre-treatment detergent (ie. Liquid Spray & Wash, Liquid Shout) **Do not use fabric softener**.

At the end of the final rinse cycle, re-adjust the garment in the washer, and put it through an additional rinse cycle. This will assure a complete rinsing of detergent that may have been trapped during washing.

#### **Drving:**

Lay flat to dry.

#### **Dry Cleaning:**

If dry cleaned, request a two-bath cycle to improve soil removal. Garments must be cleaned SEPARATELY to avoid contamination of lint from flammable fibers.

#### INSTRUCTIONS D'ENTRETIEN

Applicable à: Doublure Patrouille Unisexe Veste Peluche Fonction Spéciale.

Ce vêtement est conçu pour être ignifuge ainsi que de dissiper le statique. Maintenir propre à l'aide de lavages réguliers pour éviter la contamination du matériel et ainsi préserver ses propriétés.

NE PAS UTILISER D'AGENT ADOUCISSANT OU D'ASSOUPLISSANT EN FEUILLES

NE PAS UTILISER D'AGENT DE BLANCHIMENT NE PAS UTILISER DE DÉTERGENT POUR LAVAGE DÉLICAT (c.-à-d. Woolite, Zero)

#### Lavage à la machine :

Fermer toutes les fermetures, attaches et velcro avant de laver. Laver séparément à l'eau froide, avec un détergent liquide (c.à-d. Tide Liquide, Cheer Liquide)

Si le vêtement est très sale, utiliser un prétraitement détersif. (c.à-d Spray & Wash liquide, Shout liquide) **Ne pas utiliser d'agent adoucissant.** 

À la fin du dernier cycle de rinçage, réajuster le vêtement dans la machine et entreprendre un autre cycle de rinçage afin d'éliminer complètement le détergent qui peut être resté durant le lavage.

#### Séchage:

Sécher à plat.

#### Nettoyage à sec :

Si le vêtement est nettoyé à sec, demander pour un cycle de deux-bains pour aider l'enlèvement de la saleté. Ce vêtement doive être nettoyé SEUL pour éviter la contamination avec des fibres inflammables.

#### **APPENDIX C**

#### **Certification & Testing Criteria**

Appendix C contains the definitions for certificate of compliance and test reports that are required for this specification. The tables of requirements shall be used by the manufacturer and RCMP Uniform and Equipment Program to ensure proper documentation is received and meets the requirements outlined in this specification.

<u>Certification of compliance</u>: Compliance certification documents shall be based on testing from a raw goods manufacturer from an in-house or independent, third-party accredited laboratory acceptable to the RCMP to verify performance requirements as specified in this specification or where indicated an invoice from the raw good supplier is also acceptable.

<u>Test Report</u>: Test report documents shall include the test method, test conditions and test results performed by an independent, third-party accredited laboratory acceptable to the RCMP to verify requirements as specified in this specification.

## **APPENDIX C - Certification & Evaluation Criteria**

Para. Title/Test	Certification of	Test Report	Pass/Fail			
	Compliance		Table I Fleece	Table II Woven		
Table I - Fleece						
Colour (Visual Only)				N/A		
Fiber Content		Required		N/A		
Surface Type	Required			N/A		
Width	Required			N/A		
Mass		Required		N/A		
Fabric Thickness Initial After 5 washes		Required		N/A		
Stiffness (Drape)		Required		N/A		
Stretch Properties		Required		N/A		
Flame Resistance Damaged Length After Flame		Required		N/A		
Thermal Protective Performance (TPP)		Required		N/A		
Bursting Strength		Required		N/A		
Resistance to Pilling		Required		N/A		
Dimensional Change in Laundering After 5 washes		Required		N/A		
Colourfastness - Light		Required		N/A		
Colourfastness - To Washing		Required				
Colourfastness -To Perspiration		Required		N/A		
Colourfastness - To Crocking Wet Dry		Required		N/A		
Table II - Woven						
Fiber Content		Required	N/A			
Colour (Visual Only)			N/A			
Mass		Required	N/A			
Weave		Required	N/A			
Width		Required	N/A			
Flame Resistance Damaged Length After Flame		Required	N/A			

## **APPENDIX C - Certification & Evaluation Criteria**

Para. Title/Test	Certification of	Test Report	Pass/Fail		
	Compliance		Table I Fleece	Table II Woven	
Thermal Protective Performance (TPP)		Required	N/A		
Electrostatic Decay Initial After 5 Washes		Required	N/A		
Resistance to Pilling		Required	N/A		
Dimensional Change - To Laundering		Required	N/A		
Colourfastness - To Washing		Required	N/A		
Colourfastness - To Perspiration		Required	N/A		
Colourfastness - Light		Required	N/A		
Colourfastness - To Crocking Wet Dry		Required	N/A		

Test/Para.	Certification of Compliance	Test Report	Pass/Fail
Thread - Stitching Para. 4.1.3.1	Required		
Thread - Serging Para. 4.1.3.2	Required		
Hook & Loop Tape Para. 4.1.5	Required		
Dome Fasteners Para. 4.1.6	Required		
Slide Fastener - Front Para. 4.1.12.1	Required		
Slide Fastener - Side Seam Para. 4.1.12.2	Required		

## **SCALE OF MEASUREMENTS** - Liner, Patrol, Unisex

	SIZE BODY DESIGNATION MEASUREMENTS						GARMENT MEASUREMENTS							
Height	Size		nest	Chest Width	Bottom Width	Front Length (Bottom	Side Seam Length (Underarm	Full Shoulder Width (Shoulder	Sleeve	Length Underarm	Cuff Width	Back Length (bottom	Back Width	Collar Length
		Inches	cm	(½ only)	(½ only)	of collar to hem)	to Hem)	point to shoulder point at armhole)	(Shoulder seam to cuff)	(Underarm seam to cuff)	(½ only)	of collar at back to hem)		(Edge to edge)
X Short	XS	31" - 33"	79 - 84	50.25	47	35.5	17	14	49	45	10	50.5	36.8	46.5
4'11" -	XS	34" - 36"	86 - 91	54	50.75	37.5	18	15	50.75	46.5	10.5	52.5	40.15	48.5
5'2"	S	37" - 39"	94 - 99	57.75	54.5	39.5	19	16	52.5	48	11	54.5	43.5	50.5
150cm -	M	40" - 42"	102 - 107	61.5	58.25	41.5	20	17	54.25	49.5	11.5	56.5	46.85	52.5
157.5cm	L	43" - 45"	109 - 114	65.25	62	43.5	21	18	56	51	12	58.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	45.5	22	19	57.75	52.5	12.5	60.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	47.5	23	20	59.5	54	13	62.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	49.5	24	21	61.25	55.5	13.5	64.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	51.5	25	22	63	57	14	66.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	53.5	26	23	64.75	58.5	14.5	68.5	66.95	64.5
Short	XXS	31" - 33"	79 - 84	50.25	47	40.5	22	14	53	49	10	55.5	36.8	46.5
5'3" -	XS	34" - 36"	86 - 91	54	50.75	42.5	23	15	54.75	50.5	10.5	57.5	40.15	48.5
5'6"	S	37" - 39"	94 - 99	57.75	54.5	44.5	24	16	56.5	52	11	59.5	43.5	50.5
160cm -	M	40" - 42"	102 - 107	61.5	58.25	46.5	25	17	58.25	53.5	11.5	61.5	46.85	52.5
167.5cm	L	43" - 45"	109 - 114	65.25	62	48.5	26	18	60	55	12	63.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	50.5	27	19	61.75	56.5	12.5	65.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	52.5	28	20	63.5	58	13	67.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	54.5	29	21	65.25	59.5	13.5	69.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	56.5	30	22	67	61	14	71.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	58.5	31	23	68.75	62.5	14.5	73.5	66.95	64.5
MEASUREMENT LOCATION			A	В	С	D	Е	F	G	Н	J	K	L	
TOLERAN	NCES ±			2 cm	2 cm	2 cm	1 cm	1 cm	1.5 cm	1.5 cm	1 cm	2 cm	1 cm	1 cm

All dimensions are in centimeters unless otherwise indicated.

## **SCALE OF MEASUREMENTS** - Liner, Patrol, Unisex

SIZ DESIGNA		DDY REMENTS					GARME	NT MEASURE	MENTS					
Height	Size	Cł	nest	Chest Width	Bottom Width	Front Length	Side Seam Length	Full Shoulder Width	Sleeve	Length	Cuff Width	Back Length	Back Width	Collar Length
		Inches	cm	(½ only)	(½ only)	(Bottom of collar to hem)	(Underarm to Hem)	(Shoulder point to shoulder point at armhole)	Overarm  (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)	(½ only)	(bottom of collar at back to hem)		(Edge to edge)
Regular	XXS	31" - 33"	79 - 84	50.25	47	45.5	27	14	57	53	10	60.5	36.8	46.5
5'7" -	XS	34" - 36"	86 - 91	54	50.75	47.5	28	15	58.75	54.5	10.5	62.5	40.15	48.5
5'10"	S	37" - 39"	94 - 99	57.75	54.5	49.5	29	16	60.5	56	11	64.5	43.5	50.5
170cm -	M	40" - 42"	102 - 107	61.5	58.25	51.5	30	17	62.25	57.5	11.5	66.5	46.85	52.5
177.5cm	L	43" - 45"	109 - 114	65.25	62	53.5	31	18	64	59	12	68.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	55.5	32	19	65.75	60.5	12.5	70.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	57.5	33	20	67.5	62	13	72.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	59.5	34	21	69.25	63.5	13.5	74.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	61.5	35	22	71	65	14	76.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	63.5	36	23	72.75	66.5	14.5	78.5	66.95	64.5
Tall	XXS	31" - 33"	79 - 84	50.25	47	50.5	32	14	61	57	10	65.5	36.8	46.5
5'11" - 6'2"	XS	34" - 36"	86 - 91	54	50.75	52.5	33	15	62.75	58.5	10.5	67.5	40.15	48.5
0.2	S	37" - 39"	94 - 99	57.75	54.5	54.5	34	16	64.5	60	11	69.5	43.5	50.5
180.5cm	M	40" - 42"	102 - 107	61.5	58.25	56.5	35	17	66.25	61.5	11.5	71.5	46.85	52.5
- 188cm	L	43" - 45"	109 - 114	65.25	62	58.5	36	18	68	63	12	73.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	60.5	37	19	69.75	64.5	12.5	75.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	62.5	38	20	71.5	66	13	77.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	64.5	39	21	73.25	67.5	13.5	79.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	66.5	40	22	75	69	14	81.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	68.5	41	23	76.75	70.5	14.5	83.5	66.95	64.5
MEASUREMENT LOCATION		A	В	С	D	Е	F	G	Н	J	K	L		
	TOLE	ERANCES ±		2 cm	2 cm	2 cm	1 cm	1 cm	1.5 cm	1.5 cm	1 cm	2 cm	1 cm	1 cm

All dimensions are in centimeters unless otherwise indicated.

## **SCALE OF MEASUREMENTS** - Liner, Patrol, Unisex

SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS										
Height	Size	Chest  Inches cm		Chest Width	th Width	Front Length (Bottom of collar to hem)	Side Seam Length (Underarm to Hem)	Full Shoulder Width  (Shoulder point to shoulder point at armhole)	Sleeve Length		Cuff Width	Back Length	Back Width	Collar Length
				(½ only)					Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)	(½ only)	(bottom of collar at back to hem)		(Edge to edge)
X Tall 6'3" - 6'6"	XXS	31" - 33"	79 - 84	50.25	47	55.5	37	14	65	61	10	70.5	36.8	46.5
	XS	34" - 36"	86 - 91	54	50.75	57.5	38	15	66.75	62.5	10.5	72.5	40.15	48.5
	S	37" - 39"	94 - 99	57.75	54.5	59.5	39	16	68.5	64	11	74.5	43.5	50.5
190.5cm - 198cm	M	40" - 42"	102 - 107	61.5	58.25	61.5	40	17	70.25	65.5	11.5	76.5	46.85	52.5
	L	43" - 45"	109 - 114	65.25	62	63.5	41	18	72	67	12	78.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	65.5	42	19	73.75	68.5	12.5	80.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	67.5	43	20	75.5	70	13	82.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	69.5	44	21	77.25	71.5	13.5	84.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	71.5	45	22	79	73	14	86.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	73.5	46	23	80.75	74.5	14.5	88.5	66.95	64.5
XX Tall 6'7" - 6'10"	XXS	31" - 33"	79 - 84	50.25	47	60.5	42	14	69	65	10	75.5	36.8	46.5
	XS	34" - 36"	86 - 91	54	50.75	62.5	43	15	70.75	66.5	10.5	77.5	40.15	48.5
	S	37" - 39"	94 - 99	57.75	54.5	64.5	44	16	72.5	68	11	79.5	43.5	50.5
200.5cm - 208cm	M	40" - 42"	102 - 107	61.5	58.25	66.5	45	17	74.25	69.5	11.5	81.5	46.85	52.5
	L	43" - 45"	109 - 114	65.25	62	68.5	46	18	76	71	12	83.5	50.2	54.5
	XL	46" - 48"	117 - 122	69	65.75	70.5	47	19	77.75	72.5	12.5	85.5	53.55	56.5
	2XL	49" - 51"	124 - 129	72.75	69.5	72.5	48	20	79.5	74	13	87.5	56.9	58.5
	3XL	52" - 54"	132 - 137	76.5	73.25	74.5	49	21	81.25	75.5	13.5	89.5	60.25	60.5
	4XL	55" - 57"	140 - 145	80.25	77	76.5	50	22	83	77	14	91.5	63.6	62.5
	5XL	58" - 60"	147 - 152	84	80.75	78.5	51	23	84.75	78.5	14.5	93.5	66.95	64.5
MEASUREMENT LOCATION				A	В	С	D	Е	F	G	Н	J	K	L
TOLERANCES ±			2 cm	2 cm	2 cm	1 cm	1 cm	1.5 cm	1.5 cm	1 cm	2 cm	1 cm	1 cm	

All dimensions are in centimeters unless otherwise indicated.