ANNEX “A”

REQUIREMENT

1. TECHNICAL REQUIREMENT
The Contractor is required to provide the Department of National Defence with Suspenders, trousers in accordance with the Manufacturing data for Suspenders, Trouser, Leather Tab DSSPM 2-6-87-197, sealed patterns, drawings, and sealed sample.

2. ADDRESSES

<table>
<thead>
<tr>
<th>Destination</th>
<th>Address</th>
<th>Invoicing Address</th>
</tr>
</thead>
</table>
| WB941       | Department of National Defence  
25 CFSD Montreal  
6363 Notre Dame St. E.  
Montreal, Quebec  
H1N 1V9       | W1941  
Department of National Defence  
CFSD Montreal  
P.O. Box 4000 Stn K  
Montreal, Quebec  
H1N 3R9       |
| W248A       | Department of National Defence  
7 CF Supply Depot  
195 Ave & 82nd St., Bldg. 236  
Edmonton, Alberta  
T5J 4J5       | W2481  
Department of National Defence  
7 CF Supply Depot  
Stn Forces, P.O. Box 10500  
Edmonton, Alberta  
T5J 4J5       |

3. DELIVERABLES

CONTRACT QUANTITY

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit of Issue</th>
<th>Destination</th>
<th>Firm Quantity</th>
<th>Firm Unit Price, DDP, Transportation costs included, GST/HST extra</th>
</tr>
</thead>
</table>
| 1    | Suspenders, Trousers, overall cotton, elastic and webbing  
**color**: average green, adjustable length; leather six-point button straps | Each | Edmonton | 3,280 | $__________ |
|      |             |               | Montreal    | 4,920 | $__________ |

OPTION 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit of Issue</th>
<th>Destination</th>
<th>Estimated Quantity</th>
<th>Firm Unit Price, DDP, Transportation costs included, GST/HST extra</th>
</tr>
</thead>
</table>
| 2    | Suspenders, Trousers, overall cotton, elastic and webbing  
**color**: average green, adjustable length; leather six-point button straps | Each | Edmonton | 3,280 | $__________ |
|      |             |               | Montreal    | 4,920 | $__________ |
OPTION 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit of Issue</th>
<th>Destination</th>
<th>Estimated Quantity</th>
<th>Firm Unit Price, DDP, Transportation costs included, GST/HST extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Suspenders, Trousers, overall cotton, elastic and webbing color: average green, adjustable length; leather six-point button straps</td>
<td>Each</td>
<td>Edmonton</td>
<td>3,280</td>
<td>$__________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Montreal</td>
<td>4,920</td>
<td>$__________________</td>
</tr>
</tbody>
</table>

4. **OPTION QUANTITIES - Identified as Items 2 and 3**

The Contractor grants to Canada the irrevocable option to acquire the goods described above under the same terms and conditions as at the prices stated in the Contract. The option may only be exercised for a minimum of 50% up to a maximum of 100% distributed amongst the destinations by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option 1 within 12 months after contract award date by sending a written notice to the Contractor.

The Contracting Authority may exercise the option 2 within 24 months after contract award date by sending a written notice to the Contractor.

Only one amendment per option may be issued to exercise this option.
MANUFACTURING DATA
FOR
SUSPENDERS, TROUSERS, LEATHER TAB
NSN 8440-21-899-1687

1. SCOPE

1.1. Scope. This manufacturing data covers the materials, design, construction and inspection requirements for Suspenders, Trousers, Leather Tab.

1.2. Intended use. The suspenders shall be used for trousers, when specified, worn by National Defence personnel.

2. APPLICABLE DOCUMENTS

2.1. The following documents form part of this manufacturing data to the extent specified herein. Unless otherwise specified, the issue or amendment of documents effective for a particular contract shall be that in effect on the date of the applicable design data list, the invitation to tender or the contract.

2.2. Government documents.

SPECIFICATIONS AND STANDARDS

CFTPO – General                            Canadian Forces Transportation Packaging Order

Copies of the above documents may be obtained from The Department of National Defence, Ottawa, Ontario K1A OK2  Attention: DSCO 4-7.

2.2.1. Publications. The following documents form part of this manufacturing data to the extent specified herein. Effective dates shall be those in effect on the date of manufacture. Source is as shown;

Canadian General Standards Board Sales Unit
11 Laurier Street
Place du Portage, Phase III
Gatineau, Quebec K1A 1G6
Tel: (819) 956-0425
E-mail: ncr.cgsb-ongc@pwgsc.gc.ca

CAN/CGSB-4.2                                Textile Test Methods
CGSB 4-GP-85                                  Nylon Thread (Continuous Multifilament)
CAN/CGSB-4.131                                Cotton-Covered or Polyester-Covered Polyester Thread

OP/BPR: DSSPM 2-6

Canada

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1/9
2.2.2. Figures. The following Figures form part of this manufacturing data. Figures are not to scale.

Figure 1  Suspenders, Trousers, Leather Tab
Figure 2  Components – Dimensional Details

2.2.3. Sealed Patterns.

DCGEM 103-86  Suspenders, Trousers, Leather Tab
DSSPM 281-01  Colour Guidance Only for Canadian Average Green

2.3. Order of precedence.

2.3.1. In the event of inconsistency between contract documents, such as contract, technical data, and sealed patterns, the order of precedence shall be contract, technical data, and sealed patterns.

2.3.2. In the event of a conflict between the text of this manufacturing data and the references cited herein, the text of this manufacturing data shall take precedence.

2.3.3. In the event of inconsistency within this manufacturing data, the Design Authority (DSSPM 2-6) shall be contacted for clarification.

2.3.4. For any inconsistency in technical details between languages, the language of the original document, which in this case is English, shall take precedence.

2.3.5. Nothing in this document supersedes applicable laws and regulations, unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1. Sealed patterns. A sealed pattern, when available, will be supplied to the successful tenderer. The sealed pattern shall constitute the standard in regard to any properties not specified in this Manufacturing Data.

3.2. Design. The design shall be in accordance with Sealed Pattern 103-86 and Figure 1 and shall include the following design details:

   a. cotton elastic webbing;
   b. adjustable length, and;
   c. leather six-point button straps.

3.3. Preproduction sample. When specified in the contract, preproduction samples shall be a requirement of this Manufacturing Data. Preproduction samples shall be completely representative of the final product, being made from parts and materials as specified and by equipment and processes used in
mass production.

3.4. Materials.

3.4.1. Webbing. The webbing for the suspender shall be cotton and rubber and shall comply with the requirements specified in Table I. The colour shall be in accordance with Sealed Pattern DCGEM 103-86 or DSSPM 281-01 Colour Guidance Only for Canadian Average Green.

3.4.2. Leather. The leather shall be vegetable tanned from green or salted bovine hides.

3.4.2.1. Selection of leather. The leather shall not be pipey nor loose grain, it shall be tight fibred, mellow, yet stiff enough for the purpose. The grain shall not open when folded. The finished article shall be free from healed or open grub holes, cuts, or open surface blemishes.

3.4.2.2. Finish. The leather shall be full grain, smooth and natural finish (not buffed or snuffed) in accordance with Sealed Pattern DCGEM 103-86.

3.4.2.3. Weight. The leather shall be cut from the side of 3-1/2 to 4 ounce (1.40 to 1.80 mm) bovine leather.

3.4.3. Thread.

3.4.3.1. For seaming and stitching. Thread shall be bonded, multifilament nylon in accordance with DGSB 4-GP-85, Type 2, Class A, Tex 45. Thread shall meet the physical requirements specified in Table 2 of CGSB 4-GP-85 for Tex Ticket No. R 50 tex. The colour shall match the colour of the material being sewn.

3.4.3.2. For serging. Thread shall be either:
   a) Bonded, multifilament nylon in accordance with CGSB 4-GP-85, Type 2, Class A, Tex 45. Thread shall meet the physical requirements specified in Table 2 of CGSB 4-GP-85 for Tex Ticket No. R 50 tex, or
   b) Cotton-covered or polyester covered polyester thread in accordance with CAN/CGSB-4.131, Type 1, Tex 40. Thread shall meet the physical requirements specified in Table 1 of CAN/CGSB-4 131 for Tex Ticket No. R 50 tex. The colour shall match the colour of the material being sewn.

3.4.4. Metal fittings. The following fittings shall be steel or brass metal and dimensioned in accordance with their applicable drawings. The finish may be a black oxide finish and will be specified in the contract.

3.4.4.1. Adjusting buckles. In accordance with Sealed Pattern DCGEM 103-86

3.4.4.2. Loops. In accordance with Sealed Pattern DCGEM 103-86

3.4.4.3. Hooks. In accordance with Sealed Pattern DCGEM 103-86

3.4.4.4. Socket-button, stud and eyelets. The dimensions shall be in accordance with Sealed Pattern DCGEM 103-86.

3.5. Cutting.

3.5.1. Webbing. The webbing pieces shall be dimensioned as depicted by Sealed Pattern DCGEM 103-86 and in accordance with Figure 1.

3.5.2. Leather. The leather back junction and the back button strap holder reinforcement shall be shaped and dimensioned as shown in Figure 2. Each front leather strap holder shall be made of a piece of leather
shaped and dimensioned as shown in Figure 2. The leather button straps shall be as depicted by Sealed Pattern DCGEM 103-86 and in accordance with Figure 2.


3.6.1. Stitch types.

3.6.2. Single needle stitching shall be lockstitched using 10 to 12 stitches per inch (2.5 cm).

3.6.3. Serging. Exposed raw edges shall be serged. There shall be no less than 10 stitches per inch (2.5 cm) using a three-thread serger.

3.6.4. The end of all seams and stitching, as well as breaks in threads, shall be securely backstitched.

3.6.5. The tension of the thread in the needle and bobbin or looper shall be adjusted to ensure correctly formed stitches.

Note: In the manufacture of this item using the specified materials and sewing thread, careful consideration shall be taken to ensure that the webbing and/or leather is not damaged in stitching.

3.7. Construction.

3.7.1. Button straps. The width of each leather button strap shall be folded in half and the two edges stitched together 1/8 inch (3.2 mm) gauge, beginning and ending 2 1/4 inches (5.7 cm) from each end, in accordance with Figure 2.

3.7.2. Strap holder assembly. The ends of the front leather strap holders shall be rounded. A fastener socket-button (see 3.4.4.4) shall be centred on one end of the strap 5/8 inch (15.8 mm) from the end. The other end of the leather strap shall be inserted through a loop (see 3.4.4.2), the end folded under, over the end of a hook (see 3.4.4.3), and secured with a stud and eyelet (see 3.4.4.4) which shall be centred on the end of the leather strap to effect proper closure as depicted by Sealed Pattern DCGEM 103-86 and in accordance with Figure 2.

3.7.3. Back button strap holder. The length of the leather holder piece shall be folded in half over one of the buttons straps, one end of the back webbing shall be inserted between the two ends and shall be box stitched together 1/8 inch (3.2 mm) gauge on the inner edge and sides with the exception of the outer edge stitched at 5/8 inch (15.9 mm) to form a box 1/2 inch (12.7 mm) wide as shown in Figure 2.

3.7.4. Back Junction reinforcement. The reinforcement shall be made of two pieces of leather. One end of each over-shoulder webbing piece and the top end of the back webbing piece shall be inserted between the two leather pieces, as shown on Figure 2, and shall be double stitched around together, 1/8 inch (3.2 mm) and 1/4 inch (6.4 mm) gauge, securing the three webbing ends with the angle of the two over-shoulder webbing piece in accordance with Figure 2.

3.7.5. Buckle and strap holder assembly. Each free end of the front webbing pieces shall be inserted through the loop of a buckle as shown on Figure 2, then through the loop of a front strap holder, then again, through the loop of the buckle, from the underside. The raw end shall be serged and then folded over the loop 5/8 inch (15.9 mm) and stitched 3/8 inch (9.5 mm) gauge.

3.8. Measurements. Measurements shall be in accordance with applicable drawings.

3.9. Marking. A marking shall be stamped on the underside of the back leather junction using indelible ink. The markings shall give the following information in French and English, printed in characters not less than 1/8 inch (3.2 mm) nor more than 1/4 inch (6.4 mm) high, with the exception of the size which will be twice the size of the other characters:
3.10 Finishing. The suspenders shall be cleaned, smoothed, and folded. Suspenders shall be individually packaged in accordance with CFTPO-GENERAL. The abbreviated nomenclature for the label on the bags should read:

Suspenders, Trousers, Leather Tab
Bretelles pour pantalon, avec pattes en cuir

4. QUALITY CONTROL/INSPECTION

4.1. Inspection requirements. The requirements specified herein shall be inspected in accordance with the terms of the contract.

4.2. Responsibility for quality control/inspection.

4.3. The contractor shall be responsible for the performance of all inspections and tests necessary to demonstrate that the materiel conforms to the requirements of this manufacturing data. The contractor may utilize his own inspection and test equipment, or that of any other facility acceptable to the Quality Assurance Authority.

4.4. The Quality Assurance Authority reserves the right to perform any verification or test activities necessary to confirm that the materiel conforms to the contract requirements.

5. PACKAGING

5.1. Packaging and packing. Unless otherwise specified, packaging, packing and delivery shall be in accordance with the terms of the contract.

6. NOTES

6.1. Ordering data. Procurement documents should specify the following:

(a) Title and date of Manufacturing Data;
(b) NATO stock number and quantity required;
(c) Preproduction requirements (see 3.3);
(d) Finish for metal fittings;
(e) Packaging and packing requirements (see 5.1);
(f) Design Authority; and
(g) Quality Assurance Authority.

6.2. Definition of terms.

6.2.1. Design Authority. The Design Authority is the Government agency responsible for technical aspects of design and changes to the design and changes to the design. Unless otherwise specified in the contract, the Design Authority is the Director Soldier Systems Program Management (DSSPM).

6.2.2. Quality Assurance Authority. The Quality Assurance Authority is the Government appointed agency responsible for insuring that the materiel and services supplied by the contractor conform to the specified requirements. The Quality Assurance Authority will be specified in the contract.
6.2.3. **Master sealed pattern.** A master sealed pattern is the authorized prototype of the item to be produced, and is held only by the Government.

6.2.4. **Sealed pattern.** A sealed sample is an exact duplicate of the master sealed sample, and is available to the manufacturer to be used as a guide in production (see 3.1).

6.2.5. **DND green procurement.** The production of a product to this manufacturing data, or the evaluation of a product to this manufacturing data, may require the use of materials and/or equipment that could be hazardous. This manufacturing data does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this manufacturing data to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

6.2.6. **Enquiries.** Enquiries or recommendations for additions or deletions shall be addressed to the following address: Department of National Defence, Ottawa, Ontario K1A 0K2  Attention: DSSPM 2-6.
<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Specified Requirements</th>
<th>Minimum Acceptable</th>
<th>Maximum Acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIDTH</td>
<td>4.1*</td>
<td>1-1/2 inches (3.8 cm)</td>
<td>1-7/16 inches (3.7 cm)</td>
<td>1-9/16 inches (4.0 cm)</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>5.1*</td>
<td>12.0 yd/lb (24.1 m/kg)</td>
<td>11.5 yd/lb (23.1 m/kg)</td>
<td>12.5 yd/lb (25.1m/kg)</td>
</tr>
<tr>
<td>ELONGATION</td>
<td>4108.1**</td>
<td>60%</td>
<td>54%</td>
<td>66%</td>
</tr>
<tr>
<td>WARP YARNS</td>
<td>5.2* and 6*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Binder</td>
<td></td>
<td>36 ends of 2/37 tex carded cotton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back</td>
<td></td>
<td>30 ends of 2/74 tex carded cotton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face</td>
<td></td>
<td>68 ends of 2/37 tex carded cotton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber</td>
<td></td>
<td>21 ends of #34 extruded latex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEFT YARNS</td>
<td>5.2* and 6*</td>
<td>2x1 ends of 2/37 tex carded cotton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loom picks</td>
<td></td>
<td>22/inch (8.7/cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finish picks</td>
<td></td>
<td>36/inch (14.2/cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLOUR FASTNESS TO PERSPIRATION</td>
<td>23*</td>
<td>Colour change: Grey Scale 5</td>
<td></td>
<td>Colour change: Grey Scale 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining: Grey Scale 5***</td>
<td></td>
<td>Staining Grey Scale 4***</td>
</tr>
<tr>
<td>COLOUR FASTNESS TO DRYCLEANING</td>
<td>29.1*</td>
<td>Colour change: Grey Scale 5</td>
<td></td>
<td>Colour change: Grey Scale 4</td>
</tr>
</tbody>
</table>

* CAN/CGSB-4.2  Textile Test Methods  
** FED-STD-191  Textile Test Methods  
*** Requirement is applicable to both staining of the multifibre fabric as well as self-staining of the test specimen.
FIGURE I - SUSPENDERS, TROUSERS, LEATHER TAB

WEBBING
WIDTH: 1-1/2"
FINISHED LENGTH:
BACK: 3-1/2"
FRONT: 21" + 10" = 31"

DSSPM 2-6-87-197 - 31 March 2011