

**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des  
soumissions - TPSGC**

**11 Laurier St./ 11, rue Laurier  
Place du Portage, Phase III  
Core 0A1 / Noyau 0A1  
Gatineau, Québec K1A 0S5  
Bid Fax: (819) 997-9776**

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> THERMAL HEADWEAR		
<b>Solicitation No. - N° de l'invitation</b> W8476-134403/A	<b>Date</b> 2013-06-04	
<b>Client Reference No. - N° de référence du client</b> W8476-134403		
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$PR-707-62843		
<b>File No. - N° de dossier</b> pr707.W8476-134403	<b>CCC No./N° CCC - FMS No./N° VME</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-07-04</b>		<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>		
<b>Address Enquiries to: - Adresser toutes questions à:</b> Elder, Sylvie		<b>Buyer Id - Id de l'acheteur</b> pr707
<b>Telephone No. - N° de téléphone</b> (819) 956-3830 ( )		<b>FAX No. - N° de FAX</b> (819) 956-5454
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> See herein		

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Clothing and Textiles Division / Division des vêtements et des textiles

11 Laurier St./ 11, rue Laurier  
6B1, Place du Portage  
Gatineau, Québec K1A 0S5

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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Solicitation No. - N° de l'invitation

W8476-134403/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pr707

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

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**PART 1 - GENERAL INFORMATION****1. SECURITY REQUIREMENT**

There is no security requirement associated with this bid solicitation.

**2. Requirement**

The Requirement is detailed under Annex A of the resulting contract clauses.

**3. DEBRIEFINGS**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

**PART 2 - BIDDER INSTRUCTIONS****1. STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) calendar days

Insert: one hundred and twenty (120) calendar days

**2. SUBMISSION OF BIDS**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

**3. ENQUIRIES - BID SOLICITATION**

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

**4. APPLICABLE LAWS**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

**5. TECHNICAL DATA AND SAMPLES**

In order to receive Technical Data Package against this solicitation, potential bidders must provide details as follows:

Company Name  
Complete mailing & physical address (p.o. box numbers not acceptable)  
Area code and telephone number  
Contact name  
E-mail address  
Fax number  
Solicitation Number & Closing Date

Send your company details (by facsimile message or e-mail) to the following:

Public Works and Government Services Canada (PWGSC)  
Sylvie Elder (sylvie.elder@tpsgc-pwgsc.gc.ca)  
Facsimile Number: 819-956-5454

Technical data and samples (if applicable) may be viewed (by appointment only) at the following offices:

Public Works & Government Services Canada  
Supply Directorate  
6th floor  
1550 ave D'Estimauville  
Quebec, Que. G1J 0C7  
TEL: 418-649-2840 or 418-649-2872  
FAX: 418-648-2209

Public Works & Government Services Canada  
Place Bonaventure, South-East Portal  
800 de La Gauchetière Street West, 7th Floor  
Montreal, Quebec H5A 1L6  
TEL: 514-496-3404  
FAX: 514-496-3822

Public Works & Government Services Canada  
Suite 480, 33 City Centre Drive  
Mississauga, Ont. L5B 2N5  
TEL: 905-615-2070  
FAX 905-615-2060

Public Works & Government Services Canada  
Suite 100, 167 Lombard Avenue  
P.O. Box 1408

Winnipeg, Manitoba R3C 2Z1

TEL: 204-983-3774

FAX: 204-983-7796

## 6. SPECIFICATIONS AND STANDARDS

### 6.1 Canadian General Standards Board (CGSB) - Standards

A copy of the CGSB Standards referred to in the bid solicitation is available and may be purchased from:

Canadian General Standards Board

Place du Portage III, 6B1

11 Laurier Street

Gatineau, Québec

Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)

Fax: (819) 956-5740

E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)

CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

## 7. TRANSPORTATION COSTS INFORMATION

The Bidder is requested to provide the following information concerning transportation costs for the delivery of the units to destination:

- (a) shipping weight by unit; \_\_\_\_\_
- (b) number of items by unit; \_\_\_\_\_
- (c) cubic measurement by unit; \_\_\_\_\_
- (d) number of units per shipment: \_\_\_\_\_
- (e) name of shipping point; \_\_\_\_\_
- (f) recommended method of shipment and carrier \_\_\_\_\_
- (g) Unit cost per Destination WB941: \$ \_\_\_\_\_ W248A: \$ \_\_\_\_\_
- (h) Total cost \$ \_\_\_\_\_

## PART 3 - BID PREPARATION INSTRUCTIONS

### 1. BID PREPARATION INSTRUCTIONS

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I - Technical Bid (2 hard copies)

Section II - Financial Bid (1 hard copy)

Section III - Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation;

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html> .

To assist Canada in reaching its objectives, bidders should:

1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and

2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

3) Green Initiatives (for PWGSC information only)

Bidders are requested to provide details of their policies and practices in relation to the following initiatives:

- environmentally responsible manufacturing;
- environmentally responsible waste disposal;
- waste reduction;
- packaging;
- re-use strategies;
- recycling.

### **Section I: Technical Bid**

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work (reference pre-award sample, Part 4, Evaluation Procedures, 1.1.1 Mandatory Technical Criteria).

### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

#### **1.1 Exchange Rate Fluctuation**

C3011T      2010/01/11      Exchange Rate Fluctuation

### **Section III: Certifications**

Bidders must submit the certifications required under Part 5.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **1. EVALUATION PROCEDURES**

(a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.

(b) An evaluation team composed of representatives of Canada will evaluate the bids. Canada may/will retain the services of private contractors, Amtek Engineering, Valcom and Promaxis, who will/may participate in the evaluation process and within project requirement.

(c) If the evaluation team is missing technical documentation to complete the evaluation, the Contracting Authority will request the documentation and the bidder will have two (2) working days to send it by fax or e-mail. The documents will be dated no later than the Request for Proposal closing date. Failure to comply with the request within the specified time frame will result in the bid being declared non-responsive.

#### **1.1 TECHNICAL EVALUATION**

##### **1.1.1 MANDATORY TECHNICAL CRITERIA**

#### **PRE-AWARD SAMPLES AND SUPPORTING DOCUMENTATION**

As part of the technical evaluation, to confirm a Bidder's capability of meeting the technical requirements, one (1) pre-award sample of each of the following items : balaclava, neck gaiter and toque manufactured as per Manufacturing Data, Annexes B, C and D must be included with the bid. Certificates of Compliance listed at Annex E are also required as defined herein.

The Bidder must ensure that the required pre-award samples are manufactured in accordance with the technical requirement and are fully representative of the bid submitted. Rejection of the pre-award samples will result in the bid being declared non-responsive.

The Bidder must deliver the required pre-award samples and certificates of compliance at no charge to Canada and must ensure that they are received with the bid at time and place of bid closing.. Failure to submit the required pre-award samples and certificates of compliance within the specified time frame will result in the bid being declared non-responsive. The samples submitted by the Bidder will remain the property of Canada.

The pre-award samples will be evaluated for quality of workmanship and conformance to specified materials and measurements as per the Annexes.

The requirement for a pre-award samples and certificates of compliance will not relieve the successful bidder from submitting samples and certificates of compliance as required by the contract terms or from strictly adhering to the technical requirement of this Request For Proposal and any resultant contract.

#### **CERTIFICATE OF COMPLIANCE - DEFINITION**

A certificate of compliance is defined for this solicitation as a signed and dated certification by an appropriate official of the component manufacturer (e.g. zipper, hook and loop, webbing, etc.). It must specifically address the adherence of the offered component to the specification or manufacturing data of the technical requirement.

A separate certificate of compliance is required for each individual product or component. It must be dated within six months of the solicitation posting date; and must certify that the product for which the Certificate of Compliance was issued is the same product used in the bid submission, or in the pre-award samples or in the pre-production samples, or in the production units as applicable.

The Bidder is to note that copies of invoices, purchase orders and Certificate of Compliance for products or components that are not manufactured by the certifier are not suitable for use as a Certificate.

### **1.2 FINANCIAL EVALUATION**

#### **1.2.1 MANDATORY FINANCIAL CRITERIA**

- a. The Bidder must submit firm unit prices in Canadian dollars, applicable taxes are excluded, DDP (Montreal, Qc and Edmonton, Alb.), Incoterms 2000, transportation costs included, all applicable Customs Duties and Excise taxes included.
- b. The Bidder must submit firm unit pricing for all items and all destinations including options quantities. The Bidder is requested to quote firm unit pricing at no more than two decimal points.

Financial evaluation of the option will be done by using the total quantity for each item multiplied by the price given for year 1.

#### **1.2.2 SACC MANUAL CLAUSE**

A9033T 2012/07/16 Financial Capability



## 2. **BASIS OF SELECTION**

A bid must comply with all requirements of the bid solicitation and meet all mandatory technical and financial evaluation criteria to be declared responsive.

The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract (1 contract only). Evaluation will be established using the firm quantities for all items, including all destinations and 100% of the option quantities.

## 3. **CONTRACT FINANCIAL SECURITY**

1. If this bid is accepted, the Bidder will be required to provide contract financial security, after the bid closing date and within 10 calendar days from receipt of a written request from the Contracting Authority.

(a) a security deposit as defined in clause "Security Deposit Definition" in the amount of up to ten percent (10%) of the contract price.

2. Security deposits in the form of government guaranteed bonds with coupons attached will be accepted only if all coupons that are unmaturing, at the time the security deposit is provided, are attached to the bonds. The Contractor must provide written instructions concerning the action to be taken with respect to coupons that will mature while the bonds are pledged as security, when such coupons are in excess of the security deposit requirement.

3. If Canada does not receive the required financial security within the specified period, Canada may, as its discretion, accept another offer, issue a new bid solicitation, award a contract or reject all the bids.

## 4. **SECURITY DEPOSIT DEFINITION**

1. "security deposit" means

- (a) a bill of exchange that is payable to the Receiver General for Canada, and certified by an approved financial institution or drawn by an approved financial institution on itself; or
- (b) a Government guaranteed bond; or
- (c) an irrevocable standby letter of credit, or
- (d) such other security as may be considered appropriate by the Contracting Authority and approved by Treasury Board;

2. "approved financial institution" means

- (a) any corporation or institution that is a member of the Canadian Payments Association;
- (b) a corporation that accepts deposits that are insured by the Canada Deposit Insurance Corporation or the "Régie de l'assurance-dépôts du Québec" to the maximum permitted by law;
- (c) a credit union as defined in paragraph 137(6) the *Income Tax Act*;
- (d) a corporation that accepts deposits from the public, if repayment of the deposits is guaranteed by Canadian province or territory; or
- (e) the Canada Post Corporation.

3. "government guaranteed bond" means a bond of the Government of Canada or a bond unconditionally guaranteed as to principal and interest by the Government of Canada that is:

- (a) payable to bearer;
- (b) accompanied by a duly executed instrument of transfer of the bond to the Receiver General for Canada in accordance with the *Domestic Bonds of Canada Regulations*;
- (c) registered in the name of the Receiver General for Canada.

4. "irrevocable standby letter of credit"

- (a) means any arrangement, however named or described, whereby a financial institution (the "Issuer"), acting at the request and on the instructions of a customer (the "Applicant"), or on its behalf,
- (i) will make a payment to or to the order of Canada, as the beneficiary;
  - (ii) will accept and pay bills of exchange drawn by Canada;
  - (iii) authorizes another financial institution to effect such payment, or accept and pay such bills of exchange; or
  - (iv) authorizes another financial institution to negotiate, against written demand(s) for payment, provided that the conditions of the letter of credit are complied with.
- (b) must state the face amount which may be drawn against it;
- (c) must state its expiry date;
- (d) must provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the authorized departmental representative identified in the letter of credit by his/her office;
- (e) must provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face amount of the letter of credit;
- (f) must provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
- (g) must be issued (Issuer) or confirmed (Confirmer), in either official language, by a financial institution that is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.

## **PART 5 - CERTIFICATIONS**

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify the bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

### **1. MANDATORY CERTIFICATIONS REQUIRED PRECEDENT TO CONTRACT AWARD**

#### **1.1 Code of Conduct and Certifications - Related documentation**

By submitting a bid, the Bidder certifies, that the Bidder and its affiliates, are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

### **2. ADDITIONAL CERTIFICATIONS PRECEDENT TO CONTRACT AWARD**

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

## FEDERAL CONTRACTORS PROGRAM - \$200,000 OR MORE

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the *Government Contract Regulations*. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, <http://www.servicecanada.gc.ca/cgi-bin/search/eforms/index.cgi?app=profile&form=lab1168&dept=sc&lang=e> to the Labour Branch of HRSDC.

3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) ( ) is not subject to the FCP, having a workforce of less than 100 full time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) ( ) is not subject to the FCP, being a regulated employer under the *Employment Equity Act*, S.C. 1995, c. 44;
- (c) ( ) is subject to the requirements of the FCP, having a workforce of 100 or more full time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;
- (d) ( ) is subject to the FCP, and has a valid certificate number as follows: \_\_\_\_\_ (e.g. has not been declared an ineligible contractor by HRSDC).

Further information on the FCP is available on the following HRSDC Website:

<http://www.hrsdc.gc.ca/en/labour/equality/fcp/index.shtml>

## 2.2 CANADIAN CONTENT CERTIFICATION

### SACC MANUAL CLAUSE

A3050T

2010/01/11

Canadian Content Definition

### RULES OF ORIGIN - TEXTILES

With reference to the Canadian Content Certification clause, items on this solicitation are considered to be Canadian goods if they meet the following definition:

**MODIFIED RULE OF ORIGIN FOR TEXTILES:** "Textiles and textile articles classified in Chapters 50 to 60 inclusive of the Harmonized System that are woven, knitted or otherwise manufactured from yarns or fibres in Canada, and further processed in Canada by dyeing, finishing, coating or other processes as applicable, will be considered Canadian textiles. Woven fabrics of 100% cotton or of polyester and cotton blends that are dyed and finished in Canada will be considered Canadian."

### **RULES OF ORIGIN - APPAREL**

With reference to the Canadian Content Certification clause, apparel goods are considered to be Canadian goods according to the North American Free Trade Agreement Rules of Origin as follows:

Apparel goods classified in Chapters 61 and 62 of the Harmonized System that are both cut (or knit to shape) and sewn in Canada will be considered Canadian goods.

### **CANADIAN CONTENT CERTIFICATION**

The procurement is limited to Canadian goods.

The Bidder certifies that:

( ) the goods offered are Canadian goods as defined in paragraph 1 of clause A3050T

### **PLANT LOCATION**

Items will be manufactured at: \_\_\_\_\_

### **2.3 SAMPLES AND PRODUCTION CERTIFICATION**

The Bidder certifies that:

( ) the manufacturer that produced the pre-award samples will remain unchanged for the pre-production samples and full production of the contract quantity.

## **PART 6 - RESULTING CONTRACT CLAUSES**

### **1. SECURITY REQUIREMENT**

There is no security requirement applicable to this contract.

### **2. REQUIREMENT**

The Contractor must provide the items detailed under the Requirement at Annex A.

### **3. STANDARD CLAUSES AND CONDITIONS**

All instructions, clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual )

(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### **3.1 General Conditions**

2010A (2013/04/25), General Conditions - Goods (Medium complexity) apply to and form part of the Contract.

#### **3.2 Warranty**

Section 09 of General Conditions 2010A is amended by replacing the period of 12 months by 24 months.

All other provisions of the warranty section remain in effect.

#### 4. **TERM OF CONTRACT**

##### **4.1 Delivery Date**

##### **Delivery Required (Mandatory) - Firm Quantity**

**The delivery of June 30, 2014 is a mandatory element of this requirement.** In order to guarantee mandatory delivery, the successful bidder is required to submit a contract financial security. Refer to the contract security clause herein for details.

**Your delivery schedule should be based on the assumption that a contract will be awarded on or before August 1st, 2013.**

##### **Delivery - Firm Quantity**

The complete delivery must be made by\_\_\_\_\_.

##### **Delivery - Firm Quantity - Phased**

The first delivery must be made within 45 calendar days from the date of the written notice of approval of pre-production samples. The quantity delivered must be 500 of each balaclava, neck gaiter and toque. The balance must be delivered at the minimum rate of 1,000 of each balaclava, neck gaiter and toque weekly after the first delivery until completion of the Contract.

The delivery destinations and quantities are summarized at Annex G.

##### **Delivery - Option Quantity**

The delivery of the option quantity must commence within 45 calendar days from receipt of the contract amendment and after final delivery of the contract quantity. The quantity delivered must be 500 of each (balaclava, neck gaiter and toque). The balance must be shipped at a minimum rate of 1,000 of each balaclava, neck gaiter and toque weekly after the first delivery until completion of the option quantity.

##### **4.1.1 Delivery - Appointments**

The Contractor must make deliveries to Canadian Forces (CF) Supply Depots by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the Depot Traffic Section at the appropriate location shown below. The consignee may refuse shipments when prior arrangements have not been made.

(a) 7 CF Supply Depot Lancaster Park  
Edmonton, Alta  
780-973-4011, ext. 4524

(b) 25 CF Supply Depot Montreal  
Montreal, Qué.  
514-252-2777, ext. 2363

##### **4.1.2 Preparation for Delivery**

The Contractor must prepare all items for delivery in accordance with the latest issue of the Canadian Forces Transportation Packaging Orders as outlined in Annex F.

##### **4.1.3 Shipping Instructions - Delivery at Destination**

1. Goods must be consigned to the destination specified in the Contract and delivered:

- (a) Delivered Duty Paid (DDP) Montreal, QC and Edmonton, Alb., Incoterms 2000 for shipments from commercial contractor.

**4.2 SACC Manual Clauses**

D5510C 2012/07/16 Quality Assurance Authority (DND) - Canadian-based Contractor  
 D5540C 2010/08/16 ISO 9001:2008 - Quality Management Systems - Requirements (QAC Q)  
 D5606C 2012/07/16 Release Documents (DND) - Canadian-based Contractor  
 D6010C 2007/11/30 Palletization

**5. AUTHORITIES****5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Sylvie Elder  
 Public Works and Government Services Canada  
 Acquisitions Branch  
 Commercial and Consumer Products Directorate (CCPD)  
 Clothing & Textiles Division  
 Place du Portage, Phase III, 6A2  
 11 Laurier Street  
 Gatineau, Quebec K1A 0S5  
 Telephone : 819-956-3830 Facsimile: 819-956-5454  
 E-mail address: sylvie.elder@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

**5.2 Project Authority**

The Project Authority for the Contract is:

Name: \_\_\_\_\_ (to be advised at contract)

Department of National Defence  
 101 Colonel By Drive  
 Ottawa, Ontario  
 K1A 0K2

Telephone : \_\_\_\_\_ Facsimile: \_\_\_\_\_  
 E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matter concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

**5.3 Technical Authority**

The Technical Authority for this Contract is:

**Mailing/Shipping Address**

Department of National Defence

101 Colonel By Drive

Ottawa, Ontario

K1A 0K2

Attn: DSSPM \_\_\_\_\_ (to be advised at contract)

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

#### 5.4 Procurement Authority

The Procurement Authority for the Contract is:

\_\_\_\_\_ (To be advised at contract)

Department of National Defence

101 Colonel By Drive

Ottawa, Ontario

K1A 0K2

Telephone: \_\_\_\_-\_\_\_\_-\_\_\_\_

Facsimile: \_\_\_\_-\_\_\_\_-\_\_\_\_

E-mail: \_\_\_\_\_.

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

#### 5.5 Contractor's Representative

The person responsible for :

##### General enquiries

Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Facsimile No.: \_\_\_\_\_

E-mail address: \_\_\_\_\_

##### Delivery follow-up

Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Facsimile No.: \_\_\_\_\_

E-mail address: \_\_\_\_\_

## 6. PAYMENT

### 6.1 Basis of Payment - Firm Unit Prices

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex A for a cost of \$(amount to be inserted at contract award). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

## 6.2 SACC Manual Clauses

H1001C 2008/05/12 Multiple Payments

## 7. INVOICING INSTRUCTIONS

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

2. Invoices must be distributed as follows:

(a) The original and one (1) copy must be forwarded to the following address for certification and payment :

National Defence Headquarters  
MGen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A 0K2  
Attn: DLP \_\_\_\_\_

(b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

(c) One (1) copy must be forwarded to the consignee.

**NOTE : The original invoice (PDF format) can be sent by e-mail to the DND Procurement Authority or can be mailed to the above address and be stamped with the word "ORIGINAL" and the other copies must be stamped with the word "COPY".**

### 7.1 Release Documents - Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

- (a) One (1) copy mailed to consignee marked: "Attention: Receipts Officer";
- (b) Two (2) copies with shipment (in a waterproof envelope) to the consignee;
- (c) One (1) copy to the Contracting Authority;
- (d) One (1) copy to:

National Defence Headquarters  
Mgen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A 0K2  
Attention: \_\_\_\_\_

- (e) One (1) copy to the Quality Assurance Representative;
- (f) One (1) copy to the Contractor.

**NOTE : The original inspection document CF 1280 (PDF format) can be sent by e-mail to the DND Procurement Authority or can be mailed to the above address.**

## 8. CERTIFICATIONS



**8.1 Compliance**

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

**8.2 SACC Manual Clauses**

A3060C 2008/05/12 Canadian Content Certification

**9. APPLICABLE LAWS**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

**10. PRIORITY OF DOCUMENTS**

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the Articles of Agreement;
- b) the general conditions 2010A (2013/04/25), General Conditions - Goods (Medium Complexity);
- c) Annex A, Requirement;
- d) Annex B, Manufacturing data for balaclava;
- e) Annex C, Manufacturing data for neck gaiter;
- f) Annex D, Manufacturing data for toque;
- g) Paper Patterns;
- h) Sealed Patterns;
- i) the Contractor's bid dated \_\_\_\_\_

**11. DEFENCE CONTRACT**

SACC Manual Clause A9006C (2012/07/16) Defence Contract

**12. SACC MANUAL CLAUSES**

C2801C 2011/05/16 Priority Rating - Canadian-based Contractors

**13. MATERIALS: CONTRACTOR TOTAL SUPPLY**

The Contractor will be responsible for obtaining all materials required in the manufacture of the items specified. The delivery stated for the items allows the necessary time to obtain such materials.

**14. PROCEDURES FOR DESIGN CHANGE/DEVIATIONS**

The Contractor must follow these procedures for any proposed design change/deviation to contract specifications.

The Contractor must complete Part 1 of the Design Change/Deviation form DND 675 and forward one (1) copy to the Technical Authority and one (1) copy to the Contracting Authority.

The Contractor will be authorised to proceed upon receipt of the design change/deviation form signed by the Contracting Authority. A contract amendment will be issued to incorporate the design change/deviation in the Contract.

**15. PLANT CLOSING**

The Contractor's plant closing for Christmas and Summer holidays are as follows. During this time there will be no shipments.

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**2013-2014**

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

**2014-2015**

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

**2015-2016**

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

**2016-2017**

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

**16. PLANT LOCATION**

Items will be manufactured at: \_\_\_\_\_

**17. SUBCONTRACTOR(S)**

The following subcontractor(s) will be utilised in the performance of the contract.

Name of Company: \_\_\_\_\_

Location: \_\_\_\_\_

Value of subcontract: \$ \_\_\_\_\_

Nature of subcontracting work performed: \_\_\_\_\_

Subcontractors, other than those listed above, may not be utilised without the written permission of Canada.

**18. OVERSHIPMENT**

Overshipment will not be accepted unless prior approval is obtained from the Contracting Authority.

**19. QUALITY PLAN**

No later than 30 days after the effective date of the Contract, the Contractor must submit for acceptance by the Department of National Defence (DND) a Quality Plan prepared according to the latest issue (at contract date) of ISO 10005:2005 "Quality management systems - Guidelines for quality plans". The Quality Plan must describe how the Contractor will conform to the specified quality requirements of the Contract and specify how the required quality activities are to be carried out, including quality assurance of subcontractors. The Contractor must include a traceability matrix from the elements of the specified quality requirements to the corresponding paragraphs in the Quality Plan.

The documents referenced in the Quality Plan must be made available when requested by Public Works and Government Services Canada or DND.

If the Quality Plan was submitted as part of the bidding process, the Contractor must review and, where appropriate, revise the submitted plan to reflect any changes in requirements or planning which may have occurred as a result of pre-contract negotiations.

Upon acceptance of the Quality Plan by DND, the Contractor must implement the Quality Plan. The Contractor must make appropriate amendments to the Quality Plan throughout the term of the contract to reflect current and planned quality activities. Amendments to the Quality Plan must be acceptable to DND.

## **20. POST CONTRACT AWARD MEETING**

The Project Authority or his delegated representatives at National Defence Headquarters and the applicable DND Quality Assurance Representative (DNDQAR) must be afforded access to the Contractor's plant and all other premises where pertinent processes are being performed, on the same basis as afforded the representative of National Defence Headquarters, DGQA.

A post contract award meeting may be convened within twenty (20) calendar days after award of contract. Participants may include representatives of the Contractor, DND Technical Authority, DNDQAR, DND project Authority, Contracting Authority and the DND Procurement Authority. Other meetings may be convened as required.

The Contractor is responsible for the recording and distribution of the minutes for all contract related meeting. The minutes must be sent to the Contracting Authority for acceptance prior to the distribution to all participants or as otherwise directed in the contract within ten (10) calendar days of the subject meeting. The minutes must be used only as a record of proceedings.

## **21. PROGRESS REPORT**

The Contractor must submit a progress report on the last working day of each month covering all phases of the work. One (1) copy must be distributed to each one of the DNDQAR, the DND Procurement Authority and the Contracting Authority.

2. The progress report must contain at a minimum the following:

- a. A summary of work accomplished during the report period, material purchased and stages of production;
- b. A summary of work planned for the ensuing period;
- c. A statement as to whether the work is proceeding according to plan, full explanation for deviations from the work plan;
- d. Identification of current and potential problems which may affect the progress of the work and the proposed solutions to those problems; and
- e. Delivery status of item by size and destination

## **22. PRE-PRODUCTION SAMPLES**

1. The Contractor must provide one pre-production sample of each of the following items: balaclava, neck gaiter , toque, in accordance with Annexes B, C and D accompanied by the sealed samples if applicable, to the Procurement Authority for acceptance within 30 calendar days from date of contract award .

2. If the first samples are rejected, the Contractor must submit the second samples within 20 calendar days of notification of rejection from the Procurement Authority.

3. The Contractor must carry out all required inspection and tests to verify conformance to the technical requirements of the Contract.

4. The Contractor must provide the samples, fabric samples, a copy of the test reports and certificates of compliance for the thread in accordance with Annex E, to the Procurement Authority, transportation charges prepaid, and without charge to Canada. The samples submitted by the Contractor will remain the property of Canada.

A copy of the test reports and certificates of compliance must also be provided to the Contracting Authority.

Laboratory analysis of the product offered showing test results for specific tests listed in Annex E must be provided with the pre-production samples. Testing must be performed by an independent accredited laboratory establishment and must be in accordance with the test methods detailed in the technical requirement. The laboratory report must not be dated before the publication date of the Request for Proposal.

5. The Procurement Authority will notify the Contractor, in writing, of the conditional acceptance, acceptance or rejection of the samples. A copy of this notification will be provided by the Procurement Authority to the Contracting Authority. The notice of conditional acceptance or acceptance does not relieve the Contractor from complying with all requirements of the specifications and all other conditions of the Contract.

6. The Contractor must not commence or continue with production of the items and must not make any deliveries until the Contractor has received a written notification from the Procurement Authority that the samples are acceptable. Any production of items before sample acceptance will be at the sole risk of the Contractor.

7. Rejection by the Technical Authority via the Procurement Authority of the second samples submitted by the Contractor for failing to meet the contract requirements, will be grounds for termination of the Contract for default.

8. The samples may not be required if the Contractor is currently in production. The request for waiver of samples must be made by the Contractor in writing to the Contracting Authority. The waiving of this requirement will be at the discretion of the Technical Authority and will be evidenced through a contract amendment.

### **Production Samples**

If required, production samples may be requested by the Technical Authority. It will be manufactured in accordance with Annexes B, C and D. All tests and supporting documentation must be in accordance with the requirements at Annex E.

When source of supply for a component changes, test results in accordance with Annex E must be submitted to the Procurement Authority

### **CERTIFICATE OF COMPLIANCE - DEFINITION**

A certificate of compliance is defined for this Contract as a signed and dated certification by an appropriate official of the component manufacturer (e.g. zipper, hook and loop, webbing, etc.). It must specifically address the adherence of the offered component to the specification or manufacturing data of the technical requirement.

A separate certificate of compliance is required for each individual product or component. It must be dated within six months of the solicitation posting date; and must certify that the product for which the Certificate of Compliance was issued is the same product used in the pre-award samples, in the pre-production samples) and in the production units as applicable.

The Contractor is to note that copies of invoices, purchase orders and Certificate of Compliance for products or components that are not manufactured by the certifier are not suitable for use as a Certificate.

### **22.1 Sealed Samples - Guidance Only**

The sealed samples are representative of the required item but are not part of the technical requirement. The sealed samples may not meet the technical requirement in all respects and must be used for guidance only during production.

## **22.2 Sealed Samples - Return to Sender**

The sealed samples which may have been sent to the Contractor, are to be returned to the sender upon completion of Contract.

The sealed samples are not to be mutilated or cut, and must be returned in the same condition as sent to the Contractor.

## **23. SPECIFICATIONS AND STANDARDS**

### **23.1 Canadian General Standards Board (CGSB) - Standards**

A copy of the CGSB Standards referred to in the Contract is available and may be purchased from:

Canadian General Standards Board  
Place du Portage III, 6B1  
11 Laurier Street  
Gatineau, Québec  
Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)  
Fax: (819) 956-5740  
E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)  
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

## **24. FINANCIAL SECURITY**

1. Canada may convert the security deposit to the use of Canada if any circumstance exists which would entitle Canada to terminate the Contract for default, but any such conversion will not constitute termination of the Contract.

2. Where Canada so converts the security deposit:

(a) the proceeds will be used by Canada to complete the Work according to the conditions of the Contract, to the nearest extent that it is feasible to do so and any balance left will be returned to the Contractor on completion of the warranty period; and

(b) if Canada enters into a Contract to have the Work completed, the Contractor will:

- (i) be considered to have irrevocably abandoned the Work; and
- (ii) remain liable for the excess cost of completing the Work if the amount of the security deposit is not sufficient for such purpose. "Excess cost" means any amount over and above the amount of the Contract Price remaining unpaid together with the amount of the security deposit.

3. If Canada does not convert the security deposit to the use of Canada before completion of the contract period, Canada will return the security deposit to the Contractor within a reasonable time after such date.

4. If Canada converts the security deposit for reasons other than bankruptcy, the financial security must be reestablished to the level of the amount stated above so that this amount is continued and available until completion of the contract period

## ANNEX A REQUIREMENT

### 1. TECHNICAL REQUIREMENT

The Contractor is required to provide Canada for the Department of National Defence with balaclavas, neck gaiters and toque in accordance with the manufacturing data for balaclava, lightweight thermal , air force, DSSPM 2-13-87-4030 dated 20 February 2013, manufacturing data for neck gaiter, lightweight thermal , air force, DSSPM 2-13-87-3260 dated 20 February 2013, manufacturing data for toque, lightweight thermal , air force, DSSPM 2-13-87-3668 dated 20 February 2013.

### 2. ADDRESSES

Destination Address	Invoicing Address
<b>WB941</b> Department of National Defence 25 CFSD Montreal 6363 Notre Dame St. E. Montreal, Quebec H1N 1V9	<b>W8476</b> Department of National Defence 101 Colonel By Drive Ottawa, Ont K1A 0K2 Attn : DLP 5-3-3
<b>W248A</b> Department of National Defence 7 CF Supply Depot 195 Ave & 82nd St., Bldg. 236 Edmonton, Alberta T5J 4J5	<b>W8476</b> Department of National Defence 101 Colonel By Drive Ottawa, Ont K1A 0K2 Attn : DLP 5-3-3

### 3. DELIVERABLES

#### CONTRACT QUANTITY

##### Firm Quantity

Item	Description	Unit of Issue	Firm Quantity	Destination	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
1	Balaclava NSN 8415-20-007-4030	Each	10,000	Edmonton	\$ _____
			15,000	Montréal	\$ _____

Solicitation No. - N° de l'invitation

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Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

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Item	Description	Unit of Issue	Firm Quantity	Destination	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
2	Neck gaiter NSN 8415-20-007-3260	Each	10,000	Edmonton	\$ _____
			15,000	Montréal	\$ _____

Item	Description	Unit of Issue	Firm Quantity	Destination	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
3	Toque NSN 8415-20-007-3668	Each	10,000	Edmonton	\$ _____
			15,000	Montréal	\$ _____

#### **5. OPTION QUANTITIES - Identified as Items 4-6**

The Contractor grants to Canada the irrevocable option to acquire the goods described under items #4-6 and under the same terms and conditions and at the prices stated in the Contract. The option may only be exercised by the Contracting Authority for a minimum of 5,000 per amendment up to a maximum of 25,000 for each type, distributed amongst the items and destinations and will be evidenced through a contract amendment. The total option quantity of all amendments will not exceed 75,000.

The Contracting Authority may exercise the option within 36 months after the first delivery by sending a written notice to the Contractor.

Three amendments may result.

Year 1 - 12 months from first delivery

Year 2 - 24 months from first delivery

Year 3 - 36 months from first delivery

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Buyer ID - Id de l'acheteur

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File No. - N° du dossier

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**OPTION 1**

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
4	Balaclava NSN 8415-20-007-4030	25,000	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
5	Neck gaiter NSN 8415-20-007-3260	25,000	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, applicable taxes extra
6	Toque NSN 8415-20-007-3668	25,000	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____





National  
Defence

Défense  
nationale

Annex B to  
W8476-134403  
DSSPM 2-13-87-4030  
20 February 2013



**NOTICE**

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

**MANUFACTURING DATA**

**FOR**

**BALACLAVA, LIGHTWEIGHT THERMAL, AIR FORCE**

**NSN 8415-20-007-4030**

20 February 2013

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**OPI/BPR: DSSPM/DAPES 2-13**

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©Her Majesty in Right of Canada as represented by the Minister of National Defence, 2013

©Sa Majesté la Reine en chef du Canada représentée par le Ministre de la Défense nationale, 2013

**Canada**

**MANUFACTURING DATA / SPECIFICATIONS**  
**FOR**  
**BALACLAVA, LIGHTWEIGHT THERMAL, AIR FORCE**

**1 SCOPE**

**1.1 Scope.** This specification defines the technical requirements, including design, construction and physical properties of material used for the production of the Balaclava, lightweight thermal, Air Force

**1.2 Intended Use.** The balaclava is intended to provide thermal comfort, flame resistance and anti static properties in cold weather conditions. It is ideally suited for wear under aircrew helmets; due to flat seam construction and lightweight material.

**1.3 Classification.** This balaclava shall be classified as follows:

Balaclava, Lightweight Thermal, Air Force    NSN 8415-20-007-4030

**2 APPLICABLE DOCUMENTS**

**2.1 Government documents.** 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 invitation to tender or the contract.

**SPECIFICATIONS**

D-LM-008-036/SF-001    Specification for Marking for Storage and Shipment

D-80-001-055/SF-001    Label, Clothing and Equipment, Type I

**2.2 Other Documents.** The following documents form part of this specification to the extent specified herein. Unless otherwise specified, effective dates shall be those in effect on the date of publication

**Canadian General Standards Board**  
Gatineau, QC  
K1A 1G6

Telephone: 819-956-0425 or 1-800-665-2472  
Email: [ncr.cgsb-ongc@pwgsc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc.gc.ca)  
Website: <http://www.pwgsc.gc.ca/cgsb/home/index-e.html>

CAN/CGSB-54.1	Stitches, Part 1 & 2
CAN/CGSB-86.1-2003	Care Labelling of Textiles
CAN/CGSB-4.2	Textile Test Methods

**NFPA National Fire Protection Association**

1 Batterymarch Park  
Quincy MA 02169-7471  
USA  
Telephone: 1-800-344-3555  
Website: <http://catalog.nfpa.org>

**2.3 Sealed Pattern:**

DSSPM 364-11	Balaclava, Lightweight Thermal, Air Force
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**2.4 Paper Patterns**

2.4.1. The balaclava shall be cut using Government supplied paper patterns. The following paper patterns will be provided by the Department of National Defence: Style Code BLCVAKN422 Balaclava, Lightweight Thermal, Air Force

**2.5 Figures.** The following figures form part of the manufacturing data and are a guide to style and design.

Figure 1	How to Measure
Figure 2	Front, back and side view

**2.6 Order of Precedence**

2.6.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.

2.6.2 In the event of inconsistency within this specification, the Technical Authority (DSSPM 2-13) shall be contacted for clarification.

2.6.3 In the event of inconsistency in the contract documents such a contract, specification or sealed patterns, the order of precedence shall be contract, specification and sealed patterns.

2.6.4 The contents of this document do not supersede applicable laws and regulations, unless a specific exemption has been obtained.

### **3 REQUIREMENTS**

**3.1 Definition of Product.** The Balaclava, Lightweight Thermal Air Force has the following design features:

- a) flat seams to prevent discomfort when worn under aircrew helmets
- b) shaped crown and bibbed neck area for a close fit
- c) lightweight flame resistant, anti-static, tricot interlock knit

**3.2 Pre-Production Samples.** The contractor shall be required to submit pre-production samples. Pre-production samples shall be completely representative of the final product and shall be made from the components and materials specified, using equipment and process to be used on quantity production.

**3.3 Size.** The Balaclava, Lightweight Thermal, Air Force shall be available in one size only.

#### **3.4 Materials.**

3.4.1 **Fabric.** The balaclava shall be constructed from a tricot interlock knit. The knit fabric shall be a blend of 48.5% Kermel® brand meta-aramid fibre, 48.5% viscose and 3 % anti- static with a nominal weight of 220 g/m<sup>2</sup> in accordance with Table II. The colour shall be blue Kermel® # 5 Garde. The viscose shall be dyed to match the Kermel® blue. Sealed pattern DSSPM 364-11 is representative of this colour. Style 201101 supplied by Guillemot International Inc.; 701, Avenue Larue Québec City, QC G1C 5L1; Phone: 418-661-2952, was used during Technical Airworthiness Trials. Equivalent material and colour will be considered, no deviation on the design is allowed.

3.4.2 **Thread.** The thread used shall be a commercial Tex 27 high temperature resistant 100% aramid fiber (Nomex®) with a minimum breaking strength of 2.2 lbs. and a maximum elongation of 20 % in accordance with commercial Mil specification A-A-55217B Type II. The colour of the thread shall be a good visual match to the shell. (Kermel ® # 5 Garde)

#### **3.5 Cutting.**



3.5.1 The Balaclava shall be cut in the direction of the lengthwise grain as indicated on the pattern.

3.5.2 All pattern pieces for each Balaclava shall be cut from the same dye lot so that there is no variation in the balaclava.

3.5.3 The Balaclava shall be cut using best commercial standards and practices.

### **3.6 Sewing.**

3.6.1 All seams and stitches shall be in accordance with CAN/CGSB-54.1-M.

3.6.2 Seam allowances shall be a minimum of ¼" wide and a maximum of 3/8" wide for lapped flat lock seam Type 607 unless otherwise specified.

3.6.3 The seams of the balaclava shall be sewn using Type 607 lapped flat lock seam at 6 -7 stitches per cm. The lapped side of the seam shall be visible on the underside of the Balaclava.

3.6.4 The face opening shall be sewn with stitch type 607 flat lock serge.

3.6.5 The bottom of the balaclava shall be finished with an overlock stitch type 504, 3 thread serger, with no more than 6 stitches per cm.

3.6.6 The beginnings and ends of seams of locked stitched seaming, all other stitching and any breaks shall be neatly secured by backstitching when there is no other method used to secure the end of a seam.

3.6.7 The thread tension shall be adjusted to ensure balanced and correctly formed stitches. Skips, puckers or stitching malfunctions are not acceptable.

3.6.8 Thread ends shall be trimmed and removed.

3.6.9 The balaclava shall be sewn in accordance with best commercial standards and practices.

### **3.7 Construction.**

3.7.1 The balaclava panels shall be seamed together using a lapped flat lock seam.

3.7.2 The face opening shall be turned under ¼" and stitched in place with a flat lock serge.

3.7.3 The bottom of the Balaclava shall be finished with an overlock stitch (stitch type 504) as per the sealed sample.

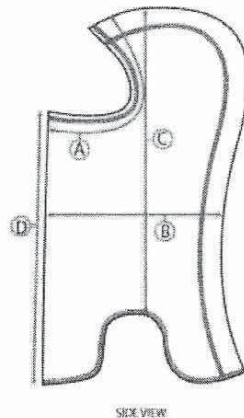
### **3.8 Scale of Measurements**

3.8.1 The balaclava shall meet the measurements as per Table I. Refer to Figure 1 for guidance in where to measure.

**Table I**

Reference	A	B	C	D
Measurements (in inches)	14	7 1/2	7 1/8	10 3/4
Tolerance (in inches)	±1/8	±1/4	±1/4	±1/4

**Figure 1. – Measurement Guide**



### 3.9 Labels.

3.9.1 Marking and care label. The following marking and care information shall be printed indelibly and legibly on the label in accordance with specification D-80-001-055/SF-001, Label Clothing and Equipment. Label, Type I is preferred for comfort since it will come in direct contact with the wearer. The label size shall be large enough to include all the information legibly up to a maximum of 2"x 2". The markings shall include the following printing in English and French in characters not less than 1/8 inch nor more than 1/4 inch in height.

- Nato stock number (NSN;)
- Contract number;
- Month and year of production; and
- Care instructions in accordance with CGSB -86.1 as follows:

Washing	Symbol 14
Bleaching	Symbol 3
Drying	Symbol 5

Ironing/Pressing	Symbol 5
Dry Cleaning	Symbol 3

**Note:** An alternative to a textile label is a label that is printed directly on the underside of the Balaclava at the centre back in a rubber material as seen in commercial athletic knit apparel. Samples may be submitted for pre award only and will be subject to approval by the Technical Authority.

**3.10 Hang Tags.** No brand or product names shall be permanently attached to the garment in any way. However brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the crown, provided that approval for text and use has been granted by the Technical Authority.

**3.11** To be inserted in each Balaclava on good quality card stock, the following shall be printed in both English and French in black font:

**Design:**

The balaclava lightweight thermal air force is designed to provide all Air Force personnel with thermal protection in cold weather conditions. It can be worn under the aircrew helmet as a stand alone item or with the Neck Gaiter Lightweight Thermal Air Force and Toque, Lightweight Thermal, Air Force.

**Conception :**

Le passe-montagne thermique léger de la force aérienne par temps froid vise à fournir un confort thermique pour tout le personnel de la Force Aérienne.. Il peut être porté seul en dessous du casque d'équipage ou avec le cache-cou thermique léger de la force aérienne et la tuque thermique légère de la force aérienne.

**Care Instructions:**

Hand wash or machine wash with similar coloured items in cold water on a gentle cycle and hang to dry. The balaclava can be placed in dryer on low temperature setting. Do not use chlorine bleach. Do not iron. Do not dry clean.

**Consignes d'entretien**

Laver à la main ou à la machine (cycle délicat) à l'eau froide avec des articles de couleur semblable. Suspendre pour sécher. Le passe-montagne peut être séché à la machine à basse température. Ne pas utiliser d'agent de blanchiment chloré. Ne pas repasser. Ne pas nettoyer à sec.

**CAUTION** - Do not use hydrocarbon solvent or fabric softener as they may be flammable and adversely affect the performance of this garment if they burn.



**ATTENTION** – Ne pas utiliser de solvant pour hydrocarbures ni d'assouplissant, car ces derniers peuvent être inflammables et nuire au rendement du vêtement s'ils prennent feu.

#### **4.0 QUALITY CONTROL/INSPECTION**

**4.1** Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The Contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.

#### **5.0 PACKAGING**

**5.1** Unless otherwise specified, packaging as well as delivery shall be in accordance with the terms of the contract. Refer to CFTPO- Annex F.

#### **6.0 NOTES**

##### **6.1 Definition of terms**

**6.1.1 Technical Authority** – The Technical Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Technical Authority for this requirement is the Director of Soldier Systems Program Management (DSSPM) 2-13, Department of National Defence.

**6.1.2 Quality Assurance Authority (QAA)**- The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement documents/contract.

**6.1.3 Master Sealed Pattern** – The Master Sealed Pattern is the only authorized prototype of the item to be produced, and is held by the Government.

**6.1.4 Sealed Pattern** – The Sealed Pattern is a duplicate of the Master Sealed Sample. Sealed Patterns are available for the Contractor's use as a guide to production. Contractors should note that Sealed Patterns may not incorporate all the details cited in this specification and the order of precedence prevails.

**6.1.5 Safety, Health and Environmental Concerns.** The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification 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 specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

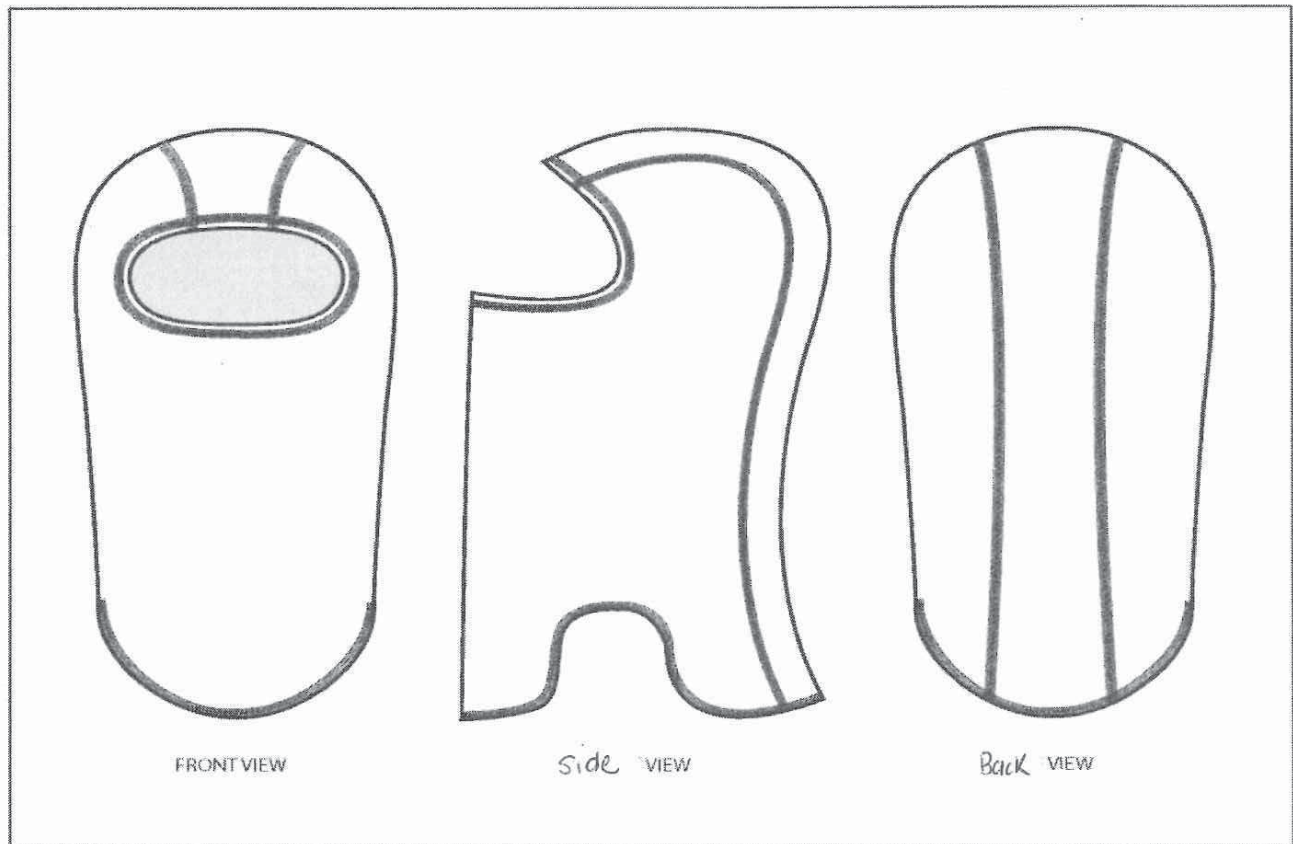
**Table II**  
**Performance Requirements for Finished Knit Fabric –Balaclava, Lightweight Thermal, Air Force**

Property	TEST METHOD	MINIMUM	MAXIMUM
Mass g/m <sup>2</sup>	CAN/CGSB 4.2 No. 5.1	203 g/m <sup>2</sup>	237 g/m <sup>2</sup>
Fabric Content	CAN/CGSB 4.2 No.14	48% Kermel 42 % viscose 2 % anti-static	53% Kermel 45% viscose 4 % anti-static
Count <sup>Note 1</sup> (yarns per cm)	CAN/CGSB 4.2 No. 57	Wales: 32 Courses: 32	Wales: 35 Courses: 35
Dimensional Stability in Laundering	CAN/CGSB 4.2 No. 58		Length: ± 8 % Width: ± 8 %
Colourfastness to Laundering	CAN/CGSB 4.2 No. 19.1		Colour change: GS 4
Colourfastness to Crocking	CAN/CGSB 4.2 No 22		Dry Staining: GS 4 Wet Staining: GS 3
Air Permeability	CAN/CGSB 4.2 No 36	100 cm <sup>3</sup> /cm <sup>2</sup> /s	

Property	TEST METHOD	MINIMUM	MAXIMUM
Static Decay (time to decay to 10 % of applied charge)  - initial -after 20 washes	FTMS 191A Method 5931 Test at 20°C & 20% RH face and back warp and weft charging to +5000V and – 5000V Report: Maximum voltage level reached and results for each side tested (face and back) and each direction (warp and weft) of the fabric.	Fabric must charge to at least +4000V  Face Warp, Face Weft, Back Warp, Back Weft Less than 0.5 seconds overall average time to decay for each face and each direction, no single measurement greater than 0.5 seconds.	
Flame Resistance  a. as received  b. after 20 washes	CAN/CGSB 4.2 No 27.10 Surface Ignition modified to 4 seconds  CAN/CGSB No 58 (III.E)		
Avg. After Flame  Avg Damaged Length			Length: 2 secs Width: 2 secs  Length: 100 mm Width: 100 mm
Thermal Protection Test (TPP)	CAN/CGSB 4.2 No 78.1 With spacer	12	
Thermal Stability	NFPA 1975 – 2009 par 8.3 ( mod ASTM D751)		No melt, no drip, no sticking to each other or glass, layers easy to separate

Note 1 The count of wales and courses has been presented here as a guideline. The final fabric shall be consistent in appearance with the sealed pattern. It shall exhibit the hand, general stretch characteristics, luster and uniformity of dye of the sealed pattern

**Balaclava, Lightweight Thermal**  
**Figure 2- Front, Back and Side View**





**NOTICE**

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

**MANUFACTURING DATA**

**FOR**

**NECK GAITER, LIGHTWEIGHT THERMAL, AIR  
FORCE**

**NSN 8415-20-007-3260**

**20 February 2013**

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**OPI/BPR: DSSPM/DAPES 2-13**

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**MANUFACTURING DATA / SPECIFICATIONS**  
**FOR**  
**NECK GAITER, LIGHTWEIGHT THERMAL, AIR FORCE**  
**NSN 8415-20-007-3260**

**1 SCOPE**

**1.1 Scope.** This specification defines the technical requirements, including design, construction and physical properties of material used for the production of the Neck Gaiter, Lightweight Thermal, Air Force.

**1.2 Intended Use.** The neck gaiter is intended to provide thermal comfort, flame resistance and anti static properties in cold weather conditions. It is ideally suited for wear as a stand alone item or worn over the Balaclava, Lightweight Thermal Air force and or with the Toque, Lightweight Thermal Air Force.

**1.3 Classification.** This neck gaiter shall be classified as follows:

Neck Gaiter, Lightweight Thermal, Air Force      NSN 8415-20-007-3260

**2 APPLICABLE DOCUMENTS**

**2.1 Government documents.** 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 invitation to tender or the contract.

**SPECIFICATIONS**

D-LM-008-036/SF-001      Specification for Marking for Storage and Shipment

D-80-001-055/SF-001      Label, Clothing and Equipment, Type 1

**2.2 Other Documents.** The following documents form part of this specification to the extent specified herein. Unless otherwise specified, effective dates shall be those in effect on the date of publication

**Canadian General Standards Board**

Gatineau, QC  
K1A 1G6  
Telephone: 819-956-0425 or 1-800-665-2472  
Email: [ncr.cgsb-ongc@pwgsc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc.gc.ca)  
Website: <http://www.pwgsc.gc.ca/cgsb/home/index-e.html>

CAN/CGSB-54.1	Stitches, Part 1 & 2
CAN/CGSB-86.1-2003	Care Labelling of Textiles
CAN/CGSB-4.2	Textile Test Methods

NFPA National Fire Protection Association  
1 Batterymarch Park  
Quincy MA 02169-7471  
USA  
Telephone: 1-800-344-3555  
Website: <http://catalog.nfpa.org>

## **2.3 Sealed Pattern:**

DSSPM 365-11	Neck Gaiter, Lightweight Thermal, Air Force
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## **2.4 Paper Patterns**

2.3.1 The neck gaiter shall be cut using Government supplied paper patterns. The following paper patterns will be provided by the Department of National Defence: Style Code NGLWAF00; Neck Gaiter, Lightweight Thermal, Air Force

**2.5 Figures.** The following figures form part of the manufacturing data and are a guide to style and design.

Figure 1	Front, and Back View
----------	----------------------

## **2.6 Order of Precedence**

2.6.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.

2.6.2 In the event of inconsistency within this specification, the Technical Authority (DSSPM 2-13) shall be contacted for clarification.

2.6.3 In the event of inconsistency in the contract documents such a contract, specification or sealed patterns, the order of precedence shall be contract, specification and sealed patterns.

2.6.4 The contents of this document do not supersede applicable laws and regulations, unless a specific exemption has been obtained.

### **3 REQUIREMENTS**

**3.1 Definition of Product.** The Neck Gaiter, Lightweight Thermal, Air Force has the following design features:

- a) double tube construction;
- b) single flat lock seam; and
- c) lightweight flame resistant anti-static tricot interlock knit.

**3.2 Pre-Production Samples.** The contractor shall be required to submit pre-production samples. Pre-production samples shall be completely representative of the final product and shall be made from the components and materials specified, using equipment and process to be used on quantity production.

**3.3 Size.** The Neck Gaiter, Lightweight Thermal, Air Force shall be available in one size only.

#### **3.4 Materials.**

**3.4.1 Fabric.** The neck gaiter shall be constructed from a tricot interlock knit. The knit fabric shall be a blend of 48.5% Kermel® brand meta-aramid fibre, 48.5% viscose and 3 % anti- static with a nominal weight of 220 g/m<sup>2</sup> in accordance with Table I. The colour shall be blue Kermel® # 5 Garde. The viscose shall be dyed to match the Kermel blue. Sealed pattern DSSPM 364-11 is representative of this colour. Style 201101 supplied by Guillemot International Inc.; 701, Avenue Larue Québec City, QC G1C 5L1; Phone: 418-661-2952, was used during Technical Airworthiness Trials. Equivalent material and colour will be considered, no deviation on the design is allowed.

**3.4.2 Thread.** The thread used shall be a commercial Tex 27 high temperature resistant 100% aramid fiber (Nomex) with a minimum breaking strength of 2.2 lbs. and a maximum elongation of 20 % in accordance with commercial Mil specification A-A-55217B Type II. The colour of the thread shall be a good visual match to the neck gaiter knit fabric (Blue - Kermel # 5 Garde)

#### **3.5 Cutting.**



3.5.1 The Neck Gaiter shall be cut in the direction of the lengthwise grain as indicated on the pattern.

3.5.2 The Neck Gaiter shall be cut using best commercial standards and practices.

### **3.6 Sewing.**

3.6.1 All seams and stitches shall be in accordance with CAN/CGSB-54.1-M.

3.6.2 Seam allowances shall be minimum of ¼” and a maximum of 3/8” wide for lapped flat lock seam Type 607 unless otherwise specified.

3.6.3 The seams of the neck gaiter shall be sewn using Type 607 lapped flat lock seam a 6 -7 stitches per cm. The lapped side of the seam shall be visible on the underside of the Neck Gaiter.

3.6.4 The hem shall be sewn with the stitch type 406 – 2 needle bottom cover stitch at 4-5 stitches per cm.

3.6.5 The thread tension shall be adjusted to ensure balanced and correctly formed stitches. Skips puckers or stitching malfunctions are not acceptable.

3.6.6 Thread ends shall be trimmed and removed.

3.6.7 The neck gaiter shall be sewn in accordance with best commercial standards and practices.

### **3.7 Construction.**

3.7.1 The neck gaiter shall be seamed together using a lapped flat lock seam.

3.7.2 The neck gaiter shall be constructed by folding the single layer of knit over and seaming the curved edges together. The tube shall be folded in half to create the neck gaiter.

3.7.3 The bottom shall be hemmed 1 inch as indicated on the paper pattern.

3.7.4 If using a sewn on label, the label shall be sewn to the inside of the neck gaiter, approximately 2” from the bottom, caught in the seam.

3.7.5 The neck gaiter when laid flat shall measure 9 ¼” (tol ± 1/8 ) wide by 11” ( tol. ± ¼”) long.

### **3.8 Labels.**

3.8.1 Marking and care label. The following marking and care information shall be printed indelibly and legibly on the label in accordance with specification D-80-001-055/SF-001, Label



Clothing and Equipment. Label, Type I is preferred for comfort since it will come in direct contact with the wearer. The label size shall be large enough to include all the information legibly up to a maximum of 2"x 2". The markings shall include the following printing in English and French in characters not less than 1/8 inch nor more than 1/4 inch in height.

- a) Nato stock number (NSN);
- b) Contract number;
- c) Month and year of production; and
- d) Care instructions in accordance with CGSB -86.1 as follows:

Washing	Symbol 14
Bleaching	Symbol 3
Drying	Symbol 5
Ironing/Pressing	Symbol 5
Dry Cleaning	Symbol 3

**Note: An alternative to a textile label is a label that is printed directly on the underside of the Neck Gaiter at the centre back in a rubber material as seen in commercial athletic knit apparel. Samples may be submitted for pre award only and will be subject to approval by the Technical Authority.**

**3.9 Hang Tags.** No brand or product names shall be permanently attached to the garment in any way. However brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the crown, provided that approval for text and use has been granted by the Technical Authority

3.9.1 To be inserted in each Neck Gaiter on good quality card stock, the following shall be printed in both English and French in black font:

**Design:**

The Neck Gaiter, Lightweight Thermal, Air Force is designed to provide thermal protection to the neck and face areas in cold weather conditions. It can be worn as a stand alone item or worn over the Balaclava, Lightweight Thermal Air force and or with the Toque, Lightweight Thermal, Air Force.

**Conception :**

Le cache-cou thermique de la force aérienne vise à fournir un confort thermique à tout le personnel de la Force Aérienne, au cou et à la figure par temps froid. Il peut être porté seul ou par-dessus le passe-montagne thermique léger de la Force aérienne et/ou avec la tuque thermique légère de la force aérienne.

**Care Instructions:**

Hand wash or machine wash with similar coloured items in cold water on a gentle cycle and hang to dry. The Neck Gaiter can be placed in dryer on low temperature setting. Do not use Chlorine bleach. Do not iron. Do not dry clean.

**Consignes d'entretien :**

Laver à la main ou à la machine (cycle délicat) à l'eau froide avec des articles de couleur semblable. Suspendre pour sécher. Le cache-cou peut être séché à la machine à basse température. Ne pas utiliser d'agent de blanchiment chloré. Ne pas repasser. Ne pas nettoyer à sec.

**CAUTION-** Do not use hydrocarbon solvent or fabric softener as they may be flammable and adversely affect the performance of this garment if they burn.

**ATTENTION** - Ne pas utiliser de solvant pour hydrocarbures ni d'assouplissant, car ces derniers peuvent être inflammables et nuire au rendement du vêtement s'ils prennent feu.

#### **4.0 QUALITY CONTROL/INSPECTION**

**4.1** Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The Contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.

#### **5.0 PACKAGING**

**5.1** Unless otherwise specified, packaging as well as delivery shall be in accordance with the terms of the contract. Refer to CFTPO- Annex F.

#### **6.0 NOTES**

**6.1** Definition of terms

**6.1.1 Technical Authority** – The Design Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Design Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM) 2-3, Department of National Defence.

**6.1.2 Quality Assurance Authority (QAA)**- The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement documents/contract.

6.1.3 Master Sealed Pattern – The Master Sealed Pattern is the only authorized prototype of the item to be produced, and is held by the Government.

6.1.4 Sealed Pattern – The Sealed Pattern is a duplicate of the Master Sealed Sample. Sealed Patterns are available for the Contractor's use as a guide to production. Contractors should note that Sealed Patterns may not incorporate all the details cited in this specification and the order of precedence prevails.

6.1.5 Safety, Health and Environmental Concerns. The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification 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 specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

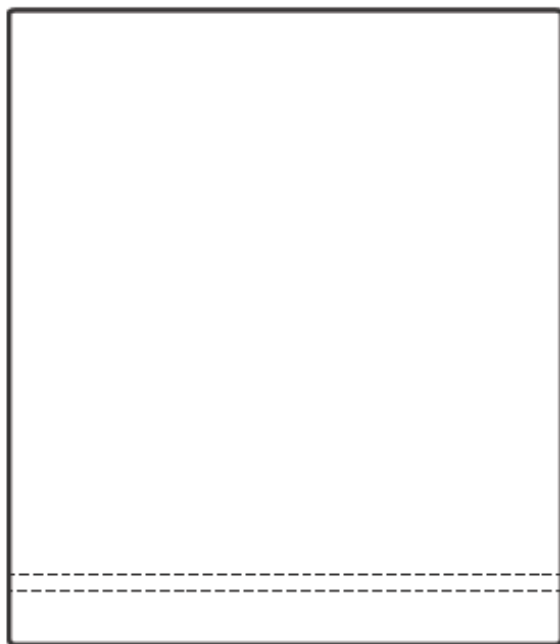
**Table I**  
**Performance Requirements for Finished Knit Fabric – Neck Gaiter, Lightweight**  
**Thermal - Air Force**

Property	TEST METHOD	MINIMUM	MAXIMUM
Mass g/m <sup>2</sup>	CAN/CGSB 4.2 No. 5.1	203 g/m <sup>2</sup>	237 g/m <sup>2</sup>
Fabric Content	CAN/CGSB 4.2 No.14	48% Kermel 42 % viscose 2 % anti-static	53% Kermel 45% viscose 4 % anti-static
Count <sup>Note 1</sup> (yarns per cm)	CAN/CGSB 4.2 No. 57	Wales: 32 Courses: 32	Wales: 35 Courses: 35
Dimensional Stability in Laundering	CAN/CGSB 4.2 No. 58		Length: ± 8 % Width: ± 8 %
Colourfastness to Laundering	CAN/CGSB 4.2 No. 19.1		Colour change: GS 4
Colourfastness to Crocking	CAN/CGSB 4.2 No 22		Dry Staining: GS 4 Wet Staining: GS 3
Air Permeability	CAN/CGSB 4.2 No 36	100 cm <sup>3</sup> /cm <sup>2</sup> /s	
Static Decay (time to decay to 10 % of applied charge)  - initial -after 20 washes	FTMS 191A Method 5931 Test at 20°C & 20% RH face and back warp and weft charging to +5000V and – 5000V Report: Maximum voltage level reached and results for each side tested (face and back) and each direction (warp and weft) of the fabric.	Fabric must charge to at least +4000V  Face Warp, Face Weft, Back Warp, Back Weft Less than 0.5 seconds overall average time to decay for each face and each direction, no single measurement greater than 0.5 seconds.	

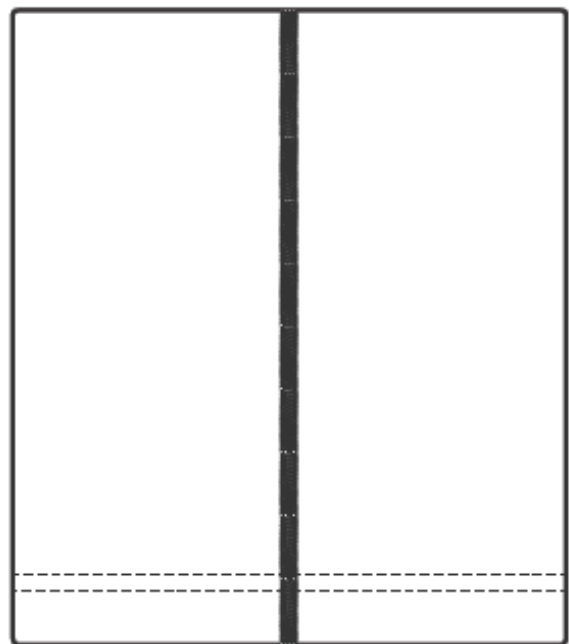
PROPERTY	TEST METHOD	MINIMUM	MAXIMUM
Flame Resistance	CAN/CGSB 4.2 No 27.10 Surface Ignition modified to 4 seconds		
a. as received			
b. after 20 washes	CAN/CGSB No 58 (III.E)		
Avg. After Flame			Length: 2 secs Width: 2 secs
Avg Damaged Length			Length: 100 mm Width: 100 mm
Thermal Protection Test (TPP)	CAN/CGSB 4.2 No 78.1 With spacer	12	
Thermal Stability	NFPA 1975 – 2009 par 8.3 ( mod ASTM D751)		No melt, no drip, no sticking to each other or glass, layers easy to separate

Note 1 The count of wales and courses has been presented here as a guideline. The final fabric shall be consistent in appearance with the sealed pattern. It shall exhibit the hand, general stretch characteristics, luster and uniformity of dye of the sealed pattern

Neck Gaiter, Lightweight Thermal, Air Force  
Figure 1- Front and Back View



FRONT



BACK



**NOTICE**

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

**MANUFACTURING DATA**  
**FOR**  
**TOQUE, LIGHTWEIGHT THERMAL, AIR FORCE**  
**NSN 8415-20-007-3668**

**20 February 2013**

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**OPI/BPR: DSSPM/DAPES 2-13**

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**MANUFACTURING DATA / SPECIFICATIONS**  
**FOR**  
**TOQUE, LIGHTWEIGHT THERMAL, AIR FORCE**  
**NSN 8415-20-007-3668**

**1 SCOPE**

**1.1 Scope.** This specification defines the technical requirements, including design, construction and physical properties of material used for the production of the Toque, Lightweight Thermal, Air Force

**1.2 Intended Use.** The toque is intended to provide thermal comfort, flame resistance and anti static properties in cold weather conditions.

**1.3 Classification.** This toque shall be classified as follows:

Toque, Lightweight Thermal, Air Force      NSN 8415-20 -007-3668

**2 APPLICABLE DOCUMENTS**

**2.1 Government documents.** 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 invitation to tender or the contract.

**SPECIFICATIONS**

D-LM-008-036/SF-001      Specification for Marking for Storage and Shipment

D-80-001-055/SF-001      Label, Clothing and Equipment, Type I

**2.2 Other Documents.** The following documents form part of this specification to the extent specified herein. Unless otherwise specified, effective dates shall be those in effect on the date of publication

**Canadian General Standards Board**

Gatineau, QC

K1A 1G6

Telephone: 819-956-0425 or 1-800-665-2472

Email: [ncr.cgsb-ongc@pwgsc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc.gc.ca)



Website: <http://www.pwgsc.gc.ca/cgsb/home/index-e.html>

CAN/CGSB-54.1	Stitches, Part 1 & 2
CAN/CGSB-86.1-2003	Care Labelling of Textiles
CAN/CGSB-4.2	Textile Test Methods

**NFPA National Fire Protection Association**

1 Batterymarch Park  
Quincy MA 02169-7471  
USA  
Telephone: 1-800-344-3555  
Website: <http://catalog.nfpa.org>

**FED STD-191A Textile Test Methods**

General Services Administration  
Federal Supply Service  
FSS Product Acquisition Center  
Supply Standards Division (FLA  
Arlington, VA 22202 USA  
Telephone: 703-605-2567  
Website: <http://apps.sa.gov.pub.fedspecs/>  
<http://assist.daps.dla.mil/quicksearch/>

**ISO International Standards**

IHS Canada  
240 Catherine Street, Suite 305  
Ottawa, ON  
K2P 2G8  
Website: <http://www.ihs.com>  
or ISO: <http://www.iso.org>

**2.3 Sealed Pattern:**

DSSPM 374-12	Toque, Lightweight Thermal, Air Force
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**2.4 Paper Patterns**

2.4.1. The toque shall be cut using Government supplied paper patterns. The following paper patterns will be provided by the Department of National Defence: Style Code **TQOPAF00**  
Toque, Lightweight Thermal, Air Force

**2.5 Figures.** The following figures form part of the manufacturing data and are a guide to style and design.

Figure 1	Where to measure – Inside front view
Figure 2	Front and back view

## **2.6 Order of Precedence**

2.6.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.

2.6.2 In the event of inconsistency within this specification, the Design Authority (DSSPM 2-13) shall be contacted for clarification.

2.6.3 In the event of inconsistency in the contract documents such a contract, specification or sealed patterns, the order of precedence shall be contract, specification and sealed patterns.

2.6.4 The contents of this document do not supersede applicable laws and regulations, unless a specific exemption has been obtained.

## **3 REQUIREMENTS**

**3.1 Definition of Product.** The Toque, Lightweight Thermal, Air Force has the following design features:

- a) flat seams to prevent any pressure point discomfort;
- b) 4 point crown construction ;
- c) lightweight flame resistant tricot interlock knit shell; and
- d) heavier weight brushed flame resistant interlock knit lining.

**3.2 Pre-Production Samples.** The contractor shall be required to submit pre-production samples. Pre-production samples shall be completely representative of the final product and shall be made from the components and materials specified, using equipment and process used in quantity production.

**3.3 Size.** Toque, Lightweight Thermal, Air Force shall be available in one size only.

### **3.4 Materials.**

3.4.1 Shell Fabric. The toque shall be constructed from a tricot interlock knit which is a blend of 53% Kermel®, 42% viscose, 4% anti- static and 2% modacrylic with a nominal weight of 358 g/m<sup>2</sup> in accordance with Table II. The colour shall be blue Kermel® # 5 Garde. The viscose shall be dyed to match the Kermel blue. Sealed pattern DSSPM 364-11 is representative of this colour. Style # 104200 supplied by Guillemot International Inc.; 701, Avenue Larue Québec

City, QC G1C 5L1; Phone: 418-661-2952, is the material used in Technical Airworthiness Trials. Equivalent material and colour will be considered, no deviation on the design is allowed.

**3.4.2 Lining Fabric.** The toque lining shall be constructed from a tricot interlock knit which is a blend of 37 % Kermel®, 23% viscose, 36 % wool and 4 % anti- static with a nominal weight of 436 g/m<sup>2</sup> in accordance with Table III. The colour shall be blue Kermel® # 5 Garde. The viscose shall be dyed to match the Kermel® blue. Sealed pattern DSSPM 364-11 is representative of this colour. Style 201101 supplied by Guillemot International Inc.; 701, Avenue Larue Québec City, QC G1C 5L1; Phone: 418-661-2952, is the material used in Technical Airworthiness Trials.

**3.4.3 Thread.** The thread used shall be a commercial Tex 27 high temperature resistant 100% aramid fiber (Nomex) with a minimum breaking strength of 2.2 lbs. and a maximum elongation of 20 % in accordance with commercial Mil specification A-A-55217B Type II. The colour of the thread shall be a good visual match to the shell and lining knit fabric. (Kermel ® # 5 Garde)

### **3.5 Cutting.**

3.5.1 The toque shall be cut in the direction of the lengthwise grain as indicated on the pattern.

3.5.2 All pattern pieces for each toque shall be cut from the same dye lot so that there is no variation in the toque.

3.5.3 The toque shall be cut using best commercial standards and practices.

### **3.6 Sewing.**

3.6.1 All seams and stitches shall be in accordance with CAN/CGSB-54.1-M.

3.6.2 Seam allowances shall be a minimum of ¼” to a maximum of 3/8” wide for lapped flat lock seam Type 607 unless otherwise specified.

3.6.3 The seams of the toque shall be sewn using Type 607 lapped flat lock seam at 6 -7 stitches per cm. The lapped side of the seam shall be visible on the underside of the toque.

3.6.4 The beginnings and ends of seams of locked stitched seaming, all other stitching, and any breaks shall be neatly secured by backstitching when there is no other method used to secure the end of a seam.

3.6.5 The thread tension shall be adjusted to ensure balanced and correctly formed stitches. Skips puckers or stitching malfunctions are not acceptable.

3.6.6 Thread ends shall be trimmed and removed.

3.6.7 The toque shall be sewn in accordance with best commercial standards and practices.

### **3.7 Construction.**

3.7.1 The toque panels shall be seamed together using a lapped flat lock seam as per the sealed sample.

3.7.2 All seams including the crown seams shall be flat lock serged through both layers, the shell and lining with the exception where the shell is joined to the lining.

3.7.3 Accuracy shall be taken to ensure that the four points line up at the crown.

3.7.4 The label shall be sewn to the inside (lining side) of the toque along the lining seam halfway between the lining/shell seam and the crown of the toque.

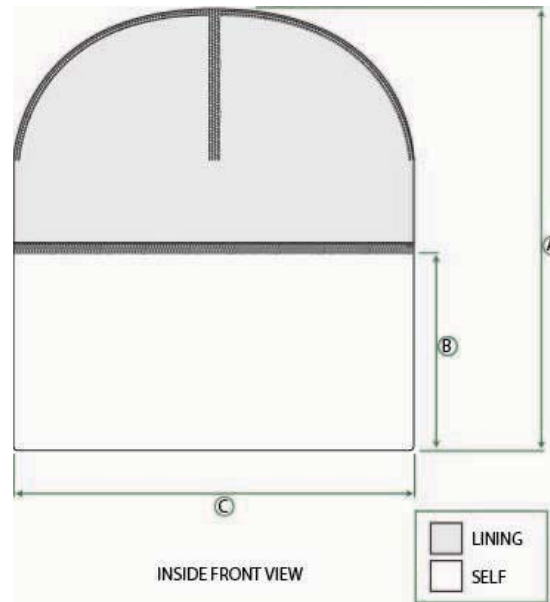
### **3.8 Scale of Measurements**

3.8. The toque shall meet the measurements as per Table I. Refer to Figure 1 for where to measure.

**Table I**

Where to Measure	A	B	C
Measurements (in inches)	10 1/4	4 1/4	9 1/4
Tolerance (in inches)	±1/4	±1/4	± 1/8

**Figure I- Where to Measure**



### 3.9 Labels.

3.9.1 Marking and care label. The following marking and care information shall be printed indelibly and legibly on the label in accordance with specification D-80-001-055/SF-001, Label Clothing and Equipment. Label, Type 1 is preferred for comfort since it will come in direct contact with the wearer. The label size shall be large enough to include all the information legibly up to a maximum of 2"x 2". The markings shall include the following printing in English and French in characters not less than 1/8 inch nor more than 1/4 inch in height. This label is subject to Technical Authority approval.

- a) Nato stock number (NSN);
- b) Contract number;
- c) Month and year of production; and
- d) Care instructions in accordance with CGSB -86.1 as follows:

Washing	Symbol 14
Bleaching	Symbol 3
Drying	Symbol 5
Ironing/Pressing	Symbol 5
Dry Cleaning	Symbol 3

**Note:** It is acceptable to present a label that is sewn directly onto the knit lining only in a material that is appropriate for knits and durable enough for continuous wear. The size of

**the label should be large enough to accommodate the required information. The label will be approved by the Technical Authority prior to production.**

**3.10 Hang Tags.** No brand or product names shall be permanently attached to the garment in any way. However brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the crown, provided that approval for text and use has been granted by the Technical Authority.

**3.11** To be inserted in each toque on good quality card stock, the following shall be printed in both English and French in black font:

**Design:**

The Toque, Lightweight Thermal is designed to provide the Air Force personnel with thermal protection in cold weather conditions. It can be worn as a stand alone item or with the Lightweight Thermal Balaclava and or Neck Gaiter lightweight thermal.

**Conception:**

La tuque, thermique légère est conçue pour offrir aux membres de la Force aérienne une protection thermique par temps froid. Elle peut être portée seule ou avec le passe-montagne thermique léger et/ou le cache-cou thermique léger.

**Care Instructions:**

Hand wash or machine wash with similar coloured items in cold water on a gentle cycle and hang to dry. The toque can be placed in a dryer on low temperature setting. Do not use chlorine bleach. Do not iron. Do not dry clean.

**Consignes d'entretien**

Laver à la main ou à la machine (cycle délicat) à l'eau froide avec des articles de couleur semblable. Suspendre pour sécher. La tuque peut être séchée à la machine à basse température. Ne pas utiliser d'agent de blanchiment chloré. Ne pas repasser. Ne pas nettoyer à sec.

**CAUTION-** Do not use hydrocarbon solvent or fabric softener as they may be flammable and adversely affect the performance of this garment if they burn.

**ATTENTION** – Ne pas utiliser de solvant pour hydrocarbures ni d'assouplissant, car ces derniers peuvent être inflammables et nuire au rendement du vêtement s'ils prennent feu.

## **4.0 QUALITY CONTROL/INSPECTION**

**4.1** Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services

conform to prescribed requirements. The Contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.

## **5.0 PACKAGING**

5.1 Unless otherwise specified, packaging as well as delivery shall be in accordance with the terms of the contract. Refer to CFTPO -Annex F.

## **6.0 NOTES**

### **6.1 Definition of terms**

6.1.1 Technical Authority – The Technical Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Technical Authority for this requirement is the Director of Soldier Systems Program Management (DSSPM) 2-13, Department of National Defence.

6.1.2 Quality Assurance Authority (QAA)- The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement documents/contract.

6.1.3 Master Sealed Pattern – The Master Sealed Pattern is the only authorized prototype of the item to be produced, and is held by the Government.

6.1.4 Sealed Pattern – The Sealed Pattern is a duplicate of the Master Sealed Sample. Sealed Patterns are available for the Contractor's use as a guide to production. Contractors should note that Sealed Patterns may not incorporate all the details cited in this specification and the order of precedence prevails.

6.1.5 Safety, Health and Environmental Concerns. The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification 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 specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

**Table II**

**Performance Requirements for Finished Knit Fabric- SHELL –Toque, Lightweight Thermal, Air Force**

Property	TEST METHOD	MINIMUM	MAXIMUM
Mass g/m <sup>2</sup>	CAN/CGSB 4.2 No. 5.1	340 g/m <sup>2</sup>	370 g/m <sup>2</sup>
Count <sup>Note 1</sup> (yarns per cm)	CAN/CGSB 4.2 No. 57	Wales: 11 Courses: 10	12 12
Fiber content	CAN/CGSB 4.2 No.14	52 % Kermel 41% viscose 2% modacrylic 2% anti static	54 % Kermel 43 % viscose 3 % modacrylic 4 % anti static
Dimensional Stability in Laundering	CAN/CGSB 4.2 No. 58		Length: ± 8 % Width: ± 8 %
Colourfastness to Perspiration	CAN/CGSB 4.2 No. 23		Colour change: Grey scale 4
Colourfastness to Laundering	CAN/CGSB 4.2 No 19.1, test no 2		Colour change: GS 4
Colourfastness to Crocking	CAN/CGSB 4.2 No 22		Dry Staining: GS 4 Wet Staining: GS 3
Air Permeability	CAN/CGSB 4.2 No 36	100 cm <sup>3</sup> /cm <sup>2</sup> /s	
Static Decay (time to decay to 10 % of applied charge)  - initial	FTMS 191A Method 5931 Test at 20°C & 20% RH face and back warp and weft charging to +5000V and – 5000V Report: Maximum voltage level reached and results for each side tested (face and back) and each direction (warp and weft) of the fabric.	Fabric must charge to at least +4000V  Face Warp, Face Weft, Back Warp, Back Weft Less than 0.5 seconds overall average time to decay for each face and each direction, no single measurement greater than 0.5 seconds.	



Property	TEST METHOD	MINIMUM	MAXIMUM
Flame Resistance			
a. as received	CAN/CGSB 4.2 No 27.10 mod to 4 seconds Surface Ignition		
Avg. After Flame			Length: 2 secs Width: 2 secs
Avg Damaged Length			Length: 100 mm Width: 100 mm
Thermal Protection Test (TPP)	CAN/CGSB 4.2 No 78.1	15	
Thermal Resistance Rct (clo)	ISO 11092		.35
Thermal Stability	NFPA 1975 – 2009 par 8.3 ( mod ASTM D751)		No melt, no drip, no sticking to each other or glass, layers easy to separate
Thermal Shrinkage Resistance	CAN/CGSB 155.20 par 7.3.1		Shrinkage length: Shrinkage width
Heat Resistance			Shall not melt, separate or ignite

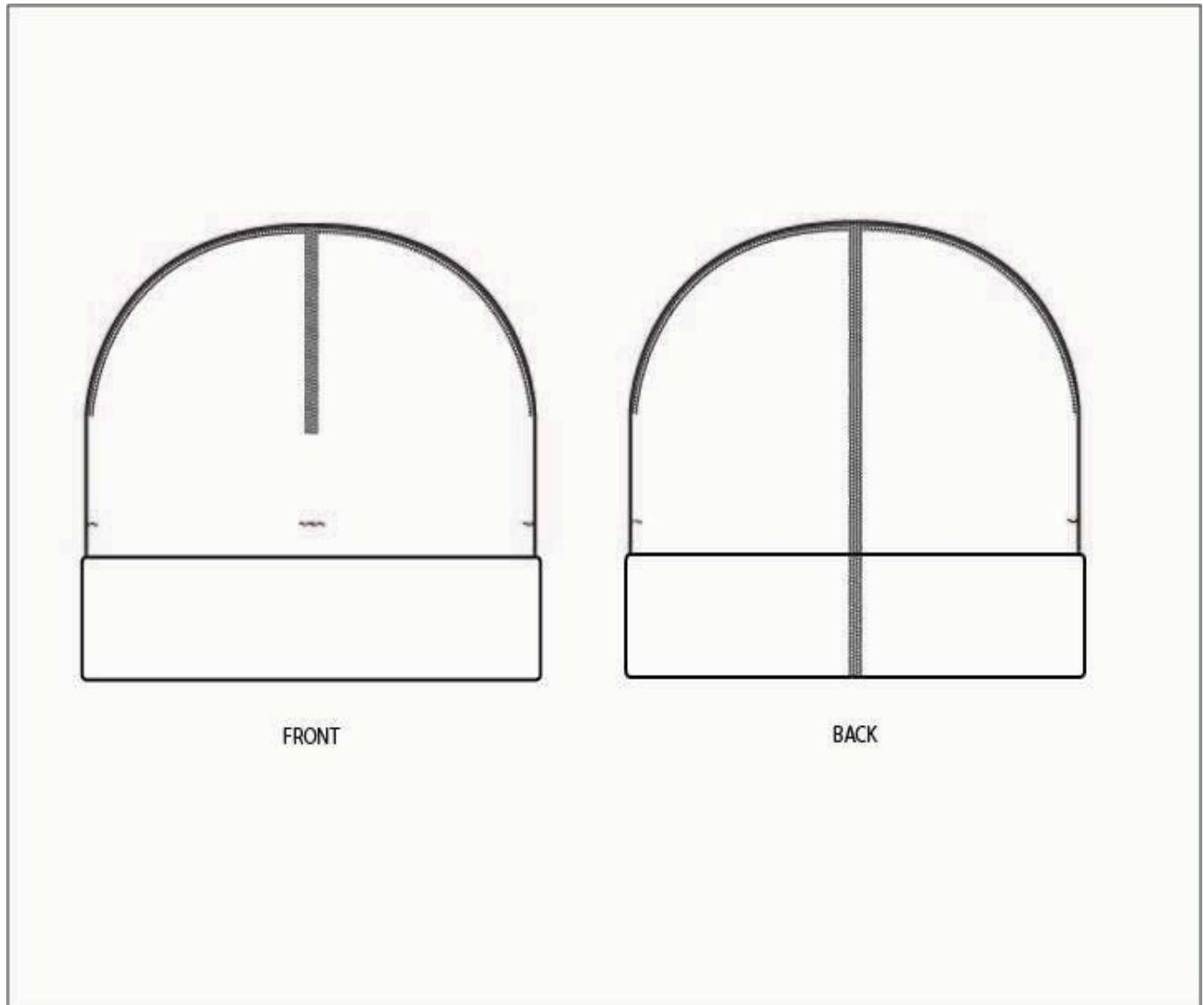
<sup>Note 1</sup> The count of wales and courses has been presented here as a guideline. The final fabric shall be consistent in appearance with the sealed pattern. It shall exhibit the hand, general stretch characteristics, luster and uniformity of dye of the sealed pattern

**Table III**  
**Performance Requirements for Finished Knit Fabric-LINING –Toque, Lightweight**  
**Thermal, Air Force**

Property	TEST METHOD	MINIMUM	MAXIMUM
Mass g/m <sup>2</sup>	CAN/CGSB 4.2 No. 5.1	420 g/m <sup>2</sup>	454 g/m <sup>2</sup>
Fiber content	CAN/CGSB 4.2 No.14	36 % Kermel 20% viscose 30% wool 2% anti static	38 % Kermel 24 % viscose 37% wool 4 % anti static
Count <sup>Note 1</sup> (yarns per cm)	CAN/CGSB 4.2 No. 57	Wales: 4 Courses: 5	Wales: 6 Courses: 7
Dimensional Stability in Laundering	CAN/CGSB 4.2 No. 58		Length: ± 10 % Width: ± 10 %
Colourfastness to Perspiration	CAN/CGSB 4.2 No. 23		Colour change: Grey scale 4
Colourfastness to Laundering	CAN/CGSB 4.2 No 19.1, test no 2		Colour change: GS 4
Colourfastness to Crocking	CAN/CGSB 4.2 No 22		Dry Staining: GS 4 Wet Staining: GS 3
Air Permeability	CAN/CGSB 4.2 No 36	80 cm <sup>3</sup> /cm <sup>2</sup> /s	
Thermal Protection Test (TPP)	CAN/CGSB 4.2 No 78.1	20	
Thermal Resistance Rct (clo)	ISO 11092	1.10	1.20

Note 1 The count of wales and courses has been presented here as a guideline. The final fabric shall be consistent in appearance with the sealed pattern. It shall exhibit the hand, general stretch characteristics, luster and uniformity of dye of the sealed pattern

**Toque, Lightweight Thermal, Air Force**  
**Figure 2- Front and Back View**



## **1.0 Quality Control Testing Requirements (Textiles) – Pre-award and Pre-production Requirements**

1.1 Tests and test results will be required on each textile at the frequency stated on the chart below, before the start of production quantities. Test results shall also be submitted before the material is put into production when there is any change in the source of supply for the material(s). DND written approval is required prior to using any material from a new supplier.

1.2 All tests and test methods shall be in accordance with the specified requirements. All tests must be carried out on the same piece of goods. All testing shall be conducted by an accredited independent laboratory familiar with textile testing. Testing carried out by university textile testing laboratories will also be acceptable. Should a non-accredited laboratory be required for specific tests, approval shall be sought and received in writing from the Technical Authority in advance.

1.3 Test requirements and the test interval are subject to change. They may be increased or decreased at the discretion of the Department of National Defense.

1.4 When a fabric sample is required, the sample and test results shall be from the same lot of fabric. The bidder shall provide assurance to the fact that all are from the same lot and that the fabric is from the lot actually used in production. DND may also request additional production samples at any time.

1.5 Although reporting of test results for all properties is not required, it is mandatory that all of the requirements be met in accordance with the applicable specification. The Crown reserves the right to carry out testing of any specified property in order to confirm the compliance of the fabric with the applicable specification in its entirety.

1.6 For option quantities, pre-production test requirements shall apply if a new batch/lot of fabric is to be used.


The following quality control requirements shall be applied throughout the life of the contract at the stated frequency detailed below.

Materials	Requirement	Pre-Award	Pre-Production	Production
Balaclava and Neck Gaiter Tricot Interlock Knit	Table II- Annex B (Balaclava) Table I - Annex C (Neck Gaiter)	Certificate of Compliance	<p>Test Results shall be submitted for the following:</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Fabric content</li> <li>- Yarn Count</li> <li>- Dimensional stability</li> <li>- Static Decay</li> <li>- TPP</li> <li>- Flame resistance</li> <li>- thermal/heat resistance</li> </ul> <p>One-half (1/2) meter full width Shell fabric(s)</p>	<p>C of C and the following test results shall be submitted if supplier changes:</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Fabric content</li> <li>- Yarn Count</li> <li>- Dimensional stability</li> <li>- Static Decay</li> <li>- TPP</li> <li>- Flame resistance</li> <li>- thermal/heat resistance</li> </ul> <p>One-half (1/2) metre full width Shell fabric(s).</p>
Touque Shell Tricot Knit fabric	Table II- Annex D	Certificate of Compliance	<p>Test Results shall be submitted for the following:</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Fiber content</li> <li>- Yarn count</li> <li>- Dimensional stability</li> <li>- Static Decay</li> <li>- TPP</li> <li>- Flame resistance</li> <li>-thermal/heat resistance</li> </ul> <p>One-half (1/2) meter full width Shell fabric(s)</p>	<p>C of C and the following test results shall be submitted if supplier changes:</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Fiber content</li> <li>- Yarn Count</li> <li>- Dimensional stability</li> <li>- Static Decay</li> <li>- TPP</li> <li>- Flame resistance</li> <li>- thermal/heat resistance</li> </ul> <p>One-half (1/2) meter full width Shell fabric(s).</p>

Materials	Requirement	Pre-Award	Pre-Production	Production
Toque Lining	Table III – Annex D	Certificate of Compliance	<p>Test results shall be submitted for the following</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Yarn count</li> <li>- Fiber content</li> <li>- Dimensional stability</li> <li>- TPP</li> </ul> <p>One-half (1/2) meter full width fabric sample (s)</p>	<p>C of C and the following test results shall be submitted if supplier changes:</p> <ul style="list-style-type: none"> <li>- Mass</li> <li>- Yarn count</li> <li>- Fiber content</li> <li>- Dimensional stability</li> <li>- TPP</li> </ul> <p>One-half (1/2) meter full width Shell fabric(s).</p>
Thread	Annex B- para 3.4.2 Annex C- para 3.4.2 Annex D- para 3.4.3	Certificate of Compliance	Certificate of Compliance	C of C if supplier changes



Annex F

<p>1. Each item of clothing, or matched pair, shall be neatly folded in accordance with good commercial practice. Items of clothing with a unit of issue "each" shall be packaged individually. All others may be packaged in larger quantities. The package shall consist of a polyethylene (or other transparent film) bag or envelope, made of material not less than one (1) mil thickness. The bags shall be taped or stapled to effect closure and shall be legibly marked (labelled) as follows (only required if the garment's identification markings are not clearly visible through the bag):</p> <p>NATO Stock Number (NSN) * - As specified on contract          Nomenclature ** - As specified on contract          Quantity / Unit of Issue - As applicable</p> <p>2. A quantity of packages, of the same size, shall be packed into a corrugated fibreboard box conforming to Canadian General Standards Board (CGSB) specification CAN/CGSB-43.22-2001. Overall inside dimensions (length, width and depth added) shall not exceed 1.5 metres (59 inches). The maximum weight of the box and contents shall not exceed 18 kilograms (40 pounds). The box size and content quantity shall be uniform for the duration of the contract.</p> <p>3. Closure of the corrugated fibreboard box shall be in accordance with CGSB specification CAN/CGSB-43.22-2001 (Appendix B).</p> <p>4. On one <u>end</u> of each corrugated fibreboard box, stencilling or labelling in figures as large as practicable in relation to the space available shall legibly mark the following information:</p> <p>NATO Stock Number (NSN) * - As specified on contract          Nomenclature ** - As specified on contract          Quantity (per box) / Unit of Issue - As applicable          Gross Weight (nearest kg) - As applicable          Contract Serial Number - As specified on contract</p> <p>5. On one <u>side</u> of each corrugated fibreboard box, stencilling or labelling in figures as large as practicable in relation to the space available shall legibly mark the following information:</p> <p>Consignee - As specified on contract          Consignor - Supplier's name or symbol          Case ____ of ____ cases - As applicable within each shipment</p> <p>6. The <u>last shipping container</u> of each shipment shall have affixed to the side on which the shipping instructions are contained (paragraph 5), an envelope containing the Packing List, Release Note, etc. This water-resistant envelope shall be prominently marked "Packing List Enclosed" and shall be securely affixed to the outside wall of the container.</p> <p>7. Shipments shall be palletized in uniform loads and strapped/secured on standard 4-way entry, 48-inch by 40-inch wood or fibreboard non-returnable pallets, to be supplied by the contractor. Total height, including pallet, shall not exceed 47 inches.</p> <p>* Marking shall be applied using Bar Code Symbology UCC/EAN-128 with AI 7001, including HRI (in accordance with D-LM-008-002/SF-001)          ** Bilingual format - English/French</p>		<p><b>CFTPO-GENERAL</b></p> <p>Date 1 Jan 2009          Sheet 1 of 1</p> <p>Nomenclature As specified on contract          Based on As specified on contract</p> <p>Draftsman H. Fraser          Checker H. Fraser          Design Engineer DSCO 3-2-4          Approval Stamp</p> 	
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Balaclava / Passe-montagne  
Neck Gaiter / Cache-cou  
Toque / Tuque

W8476-134403  
Size Roll  
Taille de roulement

Annex G  
Annexe G  
20 January / janvier 2013

BALACLAVA LIGHTWEIGHT THERMAL, AIR FORCE PASSE-MONTAGNE THERMIQUE LEGER DE LA FORCE AERIENNE					
ITEM NO	NSN NNO	SIZE GRANDEUR	QTY / QTE DESTINATION W1941 / MONTREAL	QTY / QTE DESTINATION W2841/ EDMONTON	TOTAL
001	8415-20-007-4030	ONE SIZE	15,000	10,000	25,000

NECK GAITER, LIGHTWEIGHT THERMAL, AIR FORCE CACHE-COU THERMIQUE LEGER DE LA FORCE AERIENNE					
ITEM NO	NSN NNO	SIZE GRANDEUR	QTY / QTE DESTINATION W1941 / MONTREAL	QTY / QTE DESTINATION W2841/ EDMONTON	TOTAL
002	8415-20-007-3260	ONE SIZE	15,000	10,000	25,000

TOQUE LIGHTWEIGHT THERMAL, AIR FORCE TUQUE THERMIQUE LEGER DE LA FORCE AERIENNE					
ITEM NO	NSN NNO	SIZE GRANDEUR	QTY / QTE DESTINATION W1941 / MONTREAL	QTY / QTE DESTINATION W2841/ EDMONTON	TOTAL
003	8415-20-007-3668	ONE SIZE	15,000	10,000	25,000